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# TABVLÆ SINUUM, TANGENTIVM, ET SECANTIVM, ET LOGARITHMORVM

LVGDVNI
*Apud* IOANNEM THIOLY, *vico Mercatorio sub signo Palmæ, 1670.*

BIBLIOTECA NAZ. ROMA VITTORIO EMANUELE

# TABVLÆ
# SINUUM,
# TANGENTIVM,
## ET SECANTIVM,
## ET
# LOGARITHMI
## SINVVM, TANGENTIVM,
& Numerorum ab unitate ad 10000.

*Cum Methodo facillimâ, illarum ope, reſoluendi omnia Triangula Rectilinea & Sphærica; & plurimas Quæſtiones Aſtronomicas.*

Ab A. VLACQ.

Editio ultima emendata & aucta.

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*LVGDVNI*,
Apud IOANNEM THIOLY, vico Mercatorio ſub ſigno Palmæ.

*M. DC. LXX.*

CVM PRIVILEGIO REGIS.

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# CAPVT PRIMVM, DE VSU HARVM TABVLARVM.

TABVLÆ ſequentes duplici modo diſtinctæ ſunt. Prima Tabula continet *Sinus*, *Tangentes*, & *Secantes*, cujuſvis gradûs & ſcrupuli Quadrantis, cujus Semidiameter eſt 10000000 partium; & Logarithmos *Sinum* & *Tangentium*, omiſſis expreſsè Secantium Logarithmis, quia ſine illis calculi Trigonometrici eâdem facilitate perfici poſſunt. In ſecundâ Tabulâ ſunt Logarithmi numerorum ab unitate naturali ſerie creſcentium ad 10000.

Harum Tabularum ope, quodlibet Triangulum duobus modis reſolvi poteſt: ſive per numeros vulgares Sinuum, Tangentium, & Secantium, ſive per eorundem Logarithmos.

In Regulâ proportionali, vulgò Trium dictâ, differentia calculi Trigonometrici per numeros vulgares & per eorum Logarithmos talis eſt.

 Si

Si calculare vis per numeros vulgares, numerus ordine ſecundus ducendus eſt in tertium, & productus per primum dividendus: quotus erit quartus.

Si autem lubet computare per Logarithmos eorum, Logarithmo ſecundi addendus eſt Logarithmus tertij, & ex eorum ſummâ ſubtrahendus Logarithmus primi, reliquum erit Logarithmus quarti, qui quæſitus in Tabulâ primâ, ſive ultimâ (prout ejus natura erit) oſtendet quartum quæſitum.

Modus hic altero longè facilior eſt, præcipuè in reſolutionibus omnium Triangulorum Sphæricorum: & in reſolutionibus quorundam Triangulorum Rectilineorum, veluti 3.4.6. Prop. &c. Alterum modum præferimus, quod calculatorum electioni relinquimus.

Quia autem ultima Tabula ſolummodò continet Logarithmos numerorum ab unitate ad 10000. modum monſtrabo, quo Logarithmus cujuſcumque numeri 10000000 non excedentis invenietur, & contrà.

1. Quære in ultimâ Tabulâ Logarithmum quatuor primarum figurarum numeri dati.

2. Subtrahe Logarithmum inventum ex Logarithmo proximè ſequenti in Tabulâ, vt habeas eorum differentiam.

3. Duc inventam differentiam in reliquas figuras numeri dati, & ex producto abſcinde ad dextram tot figuras, quot reliquæ fuerint.

4. Reliquum producti adde Logarithmo primùm invento; ſumma erit Logarithmus quæſitus,

ſi

ſi primam figuram mutaveris, quæ ſemper debet eſſe 1. minor numero figurarum, quibus numerus integer datus conſiſtet.

EXEMPLI GRATIA. Quæratur Logarithmus numeri 3567894. Primò invenio Logarithmum 3567, qui eſt 3.5523031, quo ſubtracto ex 3.5524248 (Logarithmo proximè ſequenti,) differentia eorum erit 1217, quâ ductâ in 894 (tres reliquas numeri dati figuras,) productum eſt 1087998, è quibus ſi tres figuræ abſcindantur, relinquuntur 1087. quibus additis Logarithmo 3.5523031, ſumma eſt 3.5524118. Tandem primâ figurâ 3. mutatâ in 6. Logarithmus numeri dati eſt 6.5524118.

Et ſic Logarithmus 125607 eſt 5.0990137. & 2358009, Logarithmus eſt 6.3725454.

NOTA.

Si datur numerus $3\frac{567894}{1000000}$ : vel $35\frac{67894}{100000}$ : vel $356\frac{7894}{10000}$, &c. Logarithmi eorum iidem ſunt qui numeri integri 3567894, exceptâ primâ figurâ, nempè 0.5524118, 1.5524118, 2.5524118. &c. & modus eos inveniendi prorsùs eſt idem.

Et ſi datur numerus integer cum fractione decimali adjunctâ, non habens plus quatuor figuris; Logarithmus ejus in eâdem Tabulâ exactè invenietur. Vt Logarithmi numeri $3\frac{567}{1000}$, vel $35\frac{67}{100}$, vel $356\frac{7}{10}$ inveniuntur juxta numerum integrum 3567, mutatâ ſolummodò primâ figurâ, vt anteà dictum eſt.

Si verò alia ſpecies fractionis numero integro fuerit adjuncta, de hoc numero fac fractionem impropriam, & ſubtrahe Logarithmum

denominatoris ex Logarithmo numeratoris, reliquum eſt Logarithmus quæſitus.

Sic $3\frac{3}{4}$ mutatis in $\frac{15}{4}$ : ſi 0.6020600 (Logarithmus 4.) ſubtrahatur ex 1.1760913 (Logarithmo 15.) reliquum 0.5740313 eſt Logarithmus $3\frac{3}{4}$ ſeu $3\frac{75}{100}$.

Vides igitur fractiones decimales tùm in uſu Logarithmorum, tùm numerorum vulgarium, magnam præbere facilitatem, ideóque aliis anteponendas.

Vt inveniatur Logarithmus numeri fracti, Logarithmus numeratoris ſubtrahendus eſt ex Logarithmo denominatoris, reliquum eſt Logarithmus quæſitus, ſi præponatur ſignum -, quod ſignificat *minùs*. Vt Logarithmus $\frac{2}{5}$ eſt 0.3979405.

Sciendum eſt autem, aliter operandum per Logarithmos numerorum fractorum quàm integrorum, vel integrorum cum fractione adjunctâ: quod hîc deſcribere omittimus, quia in reſolutionibus Triangulorum raro uſu veniunt. Qui hoc ſcire avent, diſcere poterunt ex *Arithmeticâ Logarithmicâ Henrici Briggij*, ubi fundamentum & excellentiſſimus uſus Logarithmorum in Quæſtionibus Arithmeticis & Geometricis ampliſſimè monſtrantur.

## *Invenire numerum Logarithmi dati.*

Quære in ultimâ Tabulâ inter Logarithmos numeri 1000, & 10000 (non reſpiciens primam figuram) Logarithmum quæſitum, & hæc duo animaduerte.

Primò,

Primò, ſi Logarithmus datus illic exactè invenitur, habes in margine numerum quæſitum. Et ſi prima figura Logarithmi dati minor eſt 3. abſcinde ex numero invento dextrorſum tot figuras quot ea minor eſt, reliquum eſt numerus integer quæſitus, & abſciſſæ figuræ erunt fractiones decimales ejuſdem. Si verò prima figura major eſt 3, prolonga numerum inventum tot cyphris quot ea major eſt. Sic dato Logarithmo 3.5523031, numerus ejus erit 3567. Si 2.5523031, numerus ejus erit $356\frac{7}{10}$. Si 1.5523031, numerus ejus erit $35\frac{67}{100}$. Si 0.5523031, numerus ejus erit $3\frac{567}{1000}$. Si 4.5523031, numerus ejus erit 35670. Si 5.5523031, numerus ejus erit 356700. & ſiç de reliquis.

Secundò, ſi in Tabulâ Logarithmus datus non exactè invenitur, & plures quàm quatuor figuræ quæruntur, hoc modo agendum eſt.

1. Quære, ut anteà (neglectâ primâ figurâ) Logarithmum invento reſpondentem pro quatuor primis figuris numeri quæſiti.

2. Subtrahe Logarithmum inventum ex Logarithmo dato, & reliquum augmenta tot cyphris quot figuras ultra quatuor inventas petis.

3. Diuide reliquum ſic augmentatum per differentiam Logarithmi inventi & proximè ſequentis, & quotum pone poſt quatuor inventas. Tùm reſpice primam figuram Logarithmi dati, quæ oſtendet numerum integrum & fractionem numeri quæſiti, ut anteà dictum eſt.

EXEMPLI GRATIA. Quæratur numerus reſpondens Logarithmo 4.5524118.

Logarithmus, qui in Tabulâ invenitur inter 1000 & 10000. (neglectâ primâ figurâ) dato proximè minor, eſt 3.5523031: cujus numerus 3567, quæ ſunt primæ quatuor figuræ numeri quæſiti. Logarithmo hoc invento ſubtracto ex dato relinquitur 1087, qui augmentandus eſt tribus cyphris, & erit 1087000. Divide hunc per 1217 (differentiam Logarithmi inventi & proximè ſequentis,) quotus eſt 894: pone has figuras poſt 3567, & habebis numerum 3567894. Quia autem prima figura Logarithmi dati eſt 4, numerus quæſitus eſt 35878$\frac{94}{100}$. Et ſic de reliquis.

*Invenire Radicem Quadratam vel Cubicam numeri.*

Etſi noſtra intentio ſit paucis ſolummodò hoc loco deſcribere modum ſupputandi Triangula, quia tamen uſus Logarithmorum in extractionibus Radicum quadratorum, cubicarum, &c. eſt admirabilis, viſum eſt hîc breviter addere modum eas facillimè inveniendi.

*Ut habeatur Radix quadrata numeri dati, ſume dimidium Logarithmi numeri dati, idque erit Logarithmus radicis quadratæ quæſitæ.*

Veluti ſi quæritur Radix quadrata 1257, Logarithmus ejus eſt 3.0993353, ejúſque dimidium 1.5496676, Logarithmus 35$\frac{45}{100}$ Radicis quadratæ quæſitæ.

Ad

*Ad inveniendam Radicem cubicam numeri dati, ſume tertiam partem Logarithmi numeri dati, eâque erit Logarithmus Radicis cubicæ quæſitæ.*

EXEMPLI GRATIA. Quæritur Radix cubica 12570. Logarithmus hujus eſt 4. 0993353, qui tripartitus dat 1.3664451 Logarithmum $23\frac{35}{100}$ Radicis cubicæ quæſitæ.

## *De naturâ & conſtructione Logarithmorum.*

Logarithmi ſunt numeri ad libitum aſſumpti, qui additi, aut reſpondentes numeris Geometricè proportionalibus, æqualem ſemper retinent differentiam; vel qui Arithmeticam, ubi ij quorum ſunt Logarithmi Geometricam, ſervant proportionem.

Patet id in propoſitâ Tabulâ, in cujus primâ columnâ numeri proportionales exhibentur, in ſecundâ autem & reliquis habes Logarithmos eorundem proportionalium ad libitum aſſumptos: licet enim quemcunque placuerit pro priori Logarithmo, earúmque differentiâ progreſſivâ numerum eligere. Determinato autem Logarithmo duorum numerorum, jam ampliùs liberum non eſt alios Logarithmos aſſignare; v. g. poſito quòd

| *Proport.* | *Logarithmi.* | | |
|---|---|---|---|
| 1 | 1 | 3 | 0 |
| 2 | 2 | 5 | 10 |
| 4 | 3 | 7 | 20 |
| 8 | 4 | 9 | 30 |
| 16 | 5 | 11 | 40 |
| 32 | 6 | 13 | 50 |
| 64 | 7 | 15 | 60 |
| 128 | 8 | 17 | 70 |
| 256 | 9 | 19 | 80 |
| 512 | 10 | 21 | 90 |
| 1024 | 11 | 23 | 100 |

Logarithmus unitatis ſit 1, & binarij ſit 2, neceſſario Logarithmus quaternarij erit 3, & octonarij erit 4. Quòd ſi Logarithmus unitatis fuerit 3, & binarij 5, neceſſariò Logarithmus quaternarij erit 7, octonarij 9, & ita de reliquis.

Ea eſt autem Logarithmorum proprietas, ut datis quatuor numeris proportionalibus inter ſe, Logarithmi duorum extremorum ſimul ſumpti ſint æquales Logarithmis mediorum ſimul additis.

Exemplum. Vt ſe habet 2 ad 8, ita 16 ad 64. ſumma Logarithmi 2 & Logarithmi 64 æqualis erit ſummæ Logarithmorum 8 & 16.

Hinc fit, ut omiſsâ Regulâ aureâ, quæ vulgò multiplicatione & diviſione conficitur, ut habeatur quartus proportionalis numerus, ſi ex additis ſimul mediorum Logarithmis, Logarithmus primi detrahatur, reliquus erit quæſiti quarti numeri Logarithmus, juxta quem eundem quartum numerum reperies.

Quare ſat erit Logarithmorum Tabulas conſtruere ſingulis naturalibus numeris reſpondentium, ut mox docebimus; ita autem reſpondere debent, ut ab unitate progredientes nullum intermittant numerum, ut in his proportionalibus intermittitur 1, 2, 4, 8, 16, &c. nempè 3, 5, 6, 7, 9, &c. quibus tamen debent ſui aſſignari Logarithmi, quia poſſumus iis indigere, ideò neceſſariò maximi debent eſſe exceſſus Logarithmorum, ut deinde faciliùs intermediis numeris ſuos aſſignare poſſimus Logarithmos, & fractiones numerorum naturalium euadant inſenſibiles.

Idcircò ad majorem facilitatem poſitus eſt unitatis

| *Nu. Geom. Prop.* | *Logarithmi.* |
|---|---|
| 1 | 0.0000000 |
| 10 | 1.0000000 |
| 100 | 2.0000000 |
| 1000 | 3.0000000 |
| 10000 | 4.0000000 |
| 100000 | 5.0000000 |
| 1000000 | 6.0000000 |
| 10000000 | 7.0000000 |
| 100000000 | 8.0000000 |

tatis Logarithmus 0,& numeri 10 Logarithmus 10000000, numeri 100 Logarithmus 2. 0000000, & ita deinceps, ut hæc Tabella exhibet. Vbi tamen notabis primam Logarithmi figuram (quæ *Caracteriſtica* nuncupatur,) ſemper eſſe unitate minorem quàm figuras ex quibus conſtat numerus naturalis, v.g ſi conſtet 8 figuris, prima Logarithmi figura erit 7,erit verò 8, ſi 9 conſtet figuris.

Ex quibus principiis & fundamentis educti ſunt omnium numerorum Logarithmi, etiam illorum, qui ab 1 ad 10, à 10 ad 100, à 100 ad 1000, &c. procedunt; quorum Tabulæ conditæ ſunt eâ arte, ut ſine multiplicatione & diviſione, ſolâ additione & ſubtractione Logarithmorum tribus numeris propoſitis reſpondentium habeatur Logarithmus quarti requiſiti, ejus ad latus in columnâ numerorum naturalium poſteà reperiendi.

Quod verò ſpectat ad Tabulas Sinuum & Tangentium : cùm conſtent ex numeris naturalibus, ideò multiplicatione & diviſione opùs erat ad operandum : ad quod vitandum, eorundem Sinuum & Tangentium Logarithmi inveſtigati fuêre, reſpectu Sinûs totius 10000000000, cujus Logarithmus eſt 10.0000000. Additi quoque ſunt ſecundùm eandem proportionem ſingulorum Sinuum & Tangentium loco ſui Logarithmi.

Ita ubi multiplicandi & dividendi forent, ſi

adeſſent

adeſſent, eorum vice ex additis & ſubtractis Logarithmis reſultat quartus Numerus requiſitus, juxta quem gradus & ſcrupulum reperientur, non ſecùs ac ſi eſſet Sinus ipſe aut Tangens, cùm eorum loco ſubſtituatur.

*Si vis invenire Logarithmum numeri cujuſlibet oblati, verbi gratia Novenarij, qui inter* 1, *&* 10 *comprehenditur, quorum jam dantur Logarithmi* 0. 0000000, *&* 1. 0000000, *vel* 0.00000000, *&* 1.00000000, *auctî nimirùm unâ cyphrâ, ut magis accuratè Logarithmus inveniatur. Facito in hunc modum.*

Inter unitatem A & denarium B auctum tot cyphris quot Logarithmus denarij & cæterorum proportionalium, ut hîc ſeptem, quò in eodem numero figurarum quæſitus Logarithmus accuratus inveniatur, veluti inter 1. 0000000, & 10. 0000000, medium invenito proportionalem Geometricum C, qui cùm ſit minor, 9.0000000, utpotè novenario totidem cyphris aucto, inter eum numerum C minorem & majorem B, ſecundum inquirito proportione medium D, qui cùm ſit adhuc min. 9.0000000; inter

| | *Proport.* | *Logarit.* |
|---|---|---|
| A | 1.0000000 | 0.00000000 |
| C | 3.6122777 | 0.50000000 |
| B | 10.0000000 | 1,00000000 |
| B | 10.0000000 | 1.00000000 |
| D | 5.6234132 | 0.75000000 |
| C | 3.1622777 | 0.50000000 |
| B | 10.0000000 | 1.00000000 |
| E | 7.4989421 | 0.87500000 |
| D | 5.6234132 | 0.75000000 |
| B | 10.0000000 | 1.00000000 |
| F | 8.6596432 | 0.93750000 |
| E | 7.4989421 | 0.87500000 |
| B | 10.0000000 | 1.00000000 |
| G | 9.3057204 | 0.96875000 |
| F | 8.6596432 | 0.93750000 |
| G | 9.3057204 | 0.96875000 |
| H | 8.9768713 | 0.95312500 |
| F | 8.6596432 | 0.93750000 |

inter eum minorem & denarium B proximè majorem tertium inveſtigato proportione medium E, qui adhuc minor eſt 9.0000000, idcóque inter eum & eundem denarium B, quartus erit medio-proportionalis inveniendus F, qui cùm ſit adhuc minor 9.0000000, inter eum & denarium B quintus erit medius proportionalis inveſtigandus G, qui quia major eſt 9.0000000, inter eum & proximè minorem F, ſextus erit medio-proportionalis inquirendus H, qui quia minor eſt 9.0000000, inter eum & proximè majorem G ſeptimus proportione medius indagetur I, qui quidem major eſt 9.0000000, ſed non cum tanto exceſſu quanto prior G. Atque ita inquirendo inter proximè majorem & proximè minorem medios Geo-

| | *Proport.* | *Logarith.* |
|---|---|---|
| G | 9.3057204 | 0.96875000 |
| I | 9.1398170 | 0.96093750 |
| H | 8.9768713 | 0.93312500 |
| I | 9.1398170 | 0.96093750 |
| K | 9.0579777 | 0.95703125 |
| H | 9.9768713 | 0.95312500 |
| K | 9.0579777 | 0.95703125 |
| L | 9.0173333 | 0.95507812 |
| H | 8.9768713 | 0.95312500 |
| L | 9.0173333 | 0.95507812 |
| M | 8.9970796 | 0.95410156 |
| H | 8.9768713 | 0.95312500 |
| L | 9.0173333 | 0.95507812 |
| N | 9.0072008 | 0.95458984 |
| M | 8.9970796 | 0.95410156 |
| N | 9.0072008 | 0.95458984 |
| O | 9.0021388 | 0.95434570 |
| M | 8.9970796 | 0.95410155 |
| O | 9.0021388 | 0.95434570 |
| P | 8.9996088 | 0.95422363 |
| M | 8.9970796 | 0.95410156 |
| O | 9.0021388 | 0.95434570 |
| Q | 9.0008737 | 0.95428457 |
| P | 8.9996088 | 0.95422363 |
| Q | 9.0008737 | 0.95428467 |
| R | 9.0002412 | 0.95425419 |
| P | 8.9996088 | 0.95422363 |
| R | 9.0002412 | 0.95425415 |
| S | 8.9999250 | 0.95423889 |
| P | 8.9996088 | 0.95422363 |
| R | 9.0002412 | 0.95425415 |
| T | 9.0000831 | 0.95424652 |
| S | 8.9999250 | 0.95423889 |

| | *Proport.* | *Logarit.* |
|---|---|---|
| T | 9.0000831 | 0.95424652 |
| V | 9.0000041 | 0.95424271 |
| S | 8.9999250 | 0.95423889 |
| V | 9.0000041 | 0.95424271 |
| X | 8.9999650 | 0.95424080 |
| S | 8.9999250 | 0.95423889 |
| V | 9.0000041 | 0.95424271 |
| Y | 8.9999845 | 0.95424217 |
| X | 8.9999650 | 0.95424080 |
| V | 9.0000041 | 0.95424271 |
| Z | 8.9999943 | 0.95424223 |
| Y | 8.9999845 | 0.95424217 |
| V | 9.0000041 | 0.95424271 |
| & | 8.9999992 | 0.95424247 |
| Z | 8.9999943 | 0.95424223 |
| V | 9.0000041 | 0.95424271 |
| AA | 9.0000016 | 0.95424259 |
| & | 8.9999992 | 0.95424247 |
| AA | 9.0000016 | 0.95424259 |
| BB | 9.0000004 | 0.95424253 |
| & | 8.9999992 | 0.95424247 |
| RB | 9.1000004 | 0.95424253 |
| CC | 8.9999998 | 0.95424250 |
| & | 8.9999992 | 0.95424247 |
| BB | 9.0000004 | 0.95424253 |
| DD | 9.0000000 | 0.95424251 |
| CC | 8.9999998 | 0.95424250 |

metricè proportionales, invenientur numeri ſemper magis ac magis accedentes ad propoſitum numerum 9. 0000000, qui tandem hîc occurret poſt inventos 25 proportionales Geometricos. Quo ſic obtento habebis intentum; ſicut enim inter numeros A & B medium inveniſti proportionalem Geometricum C, ſi inter eorum Logarithmos medium inveneris proportionalem Arithmeticum, erit ille, Logarithmus inventi numeri C Geometricè proportionalis; & ſic omnium inventorum Geometricè proportionalium Logarithm. aſſequeris, quapropter & ultimi ſeu novenarij propoſiti Logarithmus innoteſcet, utpotè 0.95424250.

Non aliter numerorum primorum Logarithmos aſſequeris, ex quorum Logarithmorum additione exſurgent Logarithmi numerorum non primorum, quod ex dictis antè adeò eſt manifeſtum, ut

ut me pudeat in hoc ampliora verba profundere. Scio quidem plures alios ad conſtructionem Tabulæ Logarithmorum conducentes modos, ſed iſto parabiliorem neſcio.

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# CAPUT II.

## *De reſolutione Triangulorum rectilineorum Rectangulorum.*

### OBSERVATIONES.

1. Triangulorum rectangulorum, tam rectilineorum quàm Sphæricorum, latera angulum rectum comprehendentia vocantur *Crura*, & latus eidem oppoſitum, *Hypotenuſa*.

2. Cujuſvis Trianguli, tam rectilinei quàm Sphærici, angulus major majori crure ſuſtinetur: & majus crus majori angulo.

3. Cujuſvis Trianguli rectilinei tres anguli duobus rectis æquales ſunt.

4. In propoſitionibus ſequentibus generaliter hunc ordinem obſervavimus, ut priores ſint ad inveniendos Angulos, & poſteriores ad Laterà: & horum in Triangulis rectilineis primò Crura, deinde Hypotenuſam.

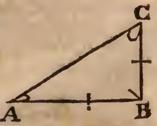
5. Conveniens eſt ut termini noti, tam Anguli quàm latera notentur paruâ lineâ, & quæſiti exiguo circulo, ſive o, ut videre eſt in ſequentibus Triangulis.

I. PROP.

I. Prop. Datis cruribus invenire angulos acutos.

*Vt crus utrumlibet,*
*Ad crus alterum;*
*Sic Sinus totus,*
*Ad Tangentem anguli cruri alteri oppoſiti.*

Exempli Gratia. In Triangulo Rectangulo A B C, datis cruribus A B 1124, & B C 606; invenire angulum A, vel C.




*Per numeros vulgares.*

| | |
|---|---|
| Vt crus A B | 1124 |
| Ad crus B C | 606 |
| Sic Sinus totus | 10000000 |
| Ad Tangentem | 5391459 : A 28. gr. 26. |
| Ideóque C ejus compl. | 61. gr. 46. |

*Per Logarithmos.*

| | | |
|---|---|---|
| Logarithmus A B 1124. | 3.0507663 | |
| Logarithmus B C 606. | 2.7824726 | |
| Logarith. Sinus totalis | 10.0000000 | |
| Logarithmus Tangentis | 9.7317063 | A 28. g. 26 |

II. Prop. Datâ Hypotenusâ, & crure utrolibet, invenire angulos acutos.

*Vt hypotenuſa,*
*Ad Sinum totum;*

*Sic*

*Sic crus datum,*

*Ad Sinum anguli cruri dato oppoſiti.*

III. Prop. Datis angulis & crure utrolibet, invenire alterum crus.

*Vt Sinus totus,*

*Ad crus datum;*

*Sic Tangens anguli acuti cruri dato adjacentis;*

*Ad crus quæſitum.*

IV. Prop. Datis angulis & hypotenuſâ, invenire crus utrumlibet.

*Vt Sinus totus,*

*Ad hypotenuſam;*

*Ita Sinus anguli cruri quæſito oppoſiti,*

*Ad crus quæſitum.*

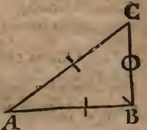
V. Prop. Datis hypotenuſâ & crure utrolibet, invenire crus alterum.

*Quære primùm angulos acutos per 2. Prop. deinde crus quæſitum per 3. aut 4. Prop.*

Aliter & facillimè per Logarithmos.

*Adde Logarithmum ſummæ Hypotenuſæ & cruris dati Logarithmo differentiæ eorundem: dimidium ſummæ Log arithmorum ſt Logarithmus cruris quæſiti.*

Exempli Gratia. In Triangulo ABC, datis Hypotenuſâ AC 1277, & crure AB 1124; quæritur crus BC.




ε Hypote

| | | | |
|---|---|---|---|
| Hypotenuſa | A C | 1277 | |
| Crus A B | | 1124 | |
| Summa | | 2401 | L. 3.3803922 |
| Differentia | | 153 | L. 2.1846914 |
| | | Summa | 5.5650836 |
| | Dimidium ſummæ | | 2.7825418 B C 606. |

VI. Prop. Datis angulis & crure utrolibet, invenire hypotenuſam.

*Vt Sinus totus,*
*Ad crus datum,*
*Ita Secans anguli acuti cruri dato adjacentis,*
*Ad hypotenuſam.*

Si quis velit cognoſcere Logarithmum Secantis arcûs cujuſdam, invenietur ſubtrahendo Logarithmum Sinûs complementi à Logarithmo duplicato Sinus totalis: reliquum erit Logarithmus quæſitus.

Sic auferendo 9.9445821 Logarithmum Sinûs 61. gr. 40. à Logar. 20. 0000000, relinquitur 10.055.4179, Logarithmus Secantis 28.gr.26.

Aliter ſine Secantibus.

*Vt Sinus anguli cruri dato oppoſiti,*
*Ad crus datum;*
*Sic Sinus totus,*
*Ad hypotenuſam.*

VII. Prop. Datis cruribus, invenire hypotenuſam.

*Quære primùm angulos per I. Prop. Deinde hypotenuſam per præcedentem VI. Prop.*

CAPVT

## CAPUT III.

### *De reſolutione Triangulorum rectilineorum obliquangulorum.*

I. Prop. Datis duobus lateribus, & Angulo alterutri eorum oppoſito; invenire angulum alteri oppoſitum: *Si notum eſt an erit acutus vel obtuſus.*

*Ut latus angulo dato oppoſitum,*
*Ad Sinum ejuſdem anguli;*
*Sic latus alterum,*
*Ad Sinum anguli lateri huic oppoſiti.*

II. Prop. Datis duobus lateribus, & angulo interjacente, invenire reliquos angulos.

*Ut aggregatum datorum laterum;*
*Ad differentiam eorundem;*
*Sic Tangens ſemiſſis aggregati angulorum quæſitorũ;*
*Ad Tangentem ſemiſſis differentiæ eorundem.*

Si igitur ſemiſſi angulorum quæſitorum (qui ſunt complementum anguli dati ad 180 gradus) differentia inventa addatur, aggregatum erit major angulus; ſi verò ſubtrahatur, reliquum erit minor angulus quæſitus.

III. Prop. Datis tribus lateribus, invenire quemlibet angulorum.

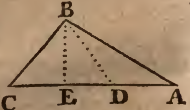
Latus maximum ſumatur pro baſi, & ſuper eam

ducatur perpendicularis, reducendo datum Triangulum in duo Triangula Rectangula : Eritque

*Vt Baſis,*
*Ad aggregatum reliquorum laterum,*
*Sic differentia eorundem,*
*Ad differentiam ſegmentorum Baſis.*

Si differentia inventa à Baſi auferatur, perpendicularis dividit reliquum in duas partes æquales. In duobus igitur Triangulis rectangulis cognoſcitur hypotenuſa & vnum crus, per quæ inveniuntur anguli *per II. Prop. Cap. II.*

EXEMPLI GRATIA.
In Triangulo obliquangulo ABC, dantur AC 1277. AB 865.& BC 632. Quæritur quilibet Angulus.




| | | *Logarithmi.* |
|---|---|---|
| Vt AC | 1277 | 3.1061909 |
| Ad AB † BC | 1497 | 3.1752218 |
| Sic AB - BC | 233 | 2.3673559 |
| | | 5.5425777 |
| Ad AD | 273 | 2.4363868 |

NOTA.

*Poteſt etiam inveniri Logarithmus numeri quarti quæſiti, ſi complementum Arithmeticum primi Logarithmi*

*rithmi ( quod eſt reliquum ejuſdem ſubducti ex* 10.0000000, *) addatur duobus reliquis, & ex aggregato auferatur prima figura ad ſiniſtram. Veluti in exemplo praecedenti.*

| | | | *Logarithmi.* |
|---|---|---|---|
| A C | - - - | 1277. | 6. 8938091 comp. Ar. |
| A B † B C | | 1497. | 3. 1752218 |
| A B - B C | | 233. | 2. 3673559 |
| A D | - - - | 273. | 12. 4363808 |

*Si Logarith. aliquis ſubduci nequit ex* 10.0000000. *veluti Logarithmi Tangentium arcuum* 45. *gr. excedentium , ſubducendus ille eſt ex* 20. 0000000 , *& operandum ut ſuprà. Sic complementum Arithmeticum Logarithmi Tangentis* 66. *gr. eſt* 9. 6485831, *qui etiam eſt Logarithmus Tangentis complementi ejuſdem.*

Si A D 273 ſubducitur ex A C 1277, relinquitur D C 1004 , cujus ſemiſſis 502 eſt C E vel D E, unde A E erit 775. Iam in Triangulo rectangulo A B E cognoſcitur hypotenuſa A B 865 , & crus A E 775 , per quæ invenitur angulus A B E 63. gr. 38′. & angulus B A E 26. gr. 22′. Et in Triangulo rectangulo C B E cognoſcitur hypotenuſa B C 632 , & crus C E 502 , per quæ invenitur angulus C B E 52. gr. 35′. & angulus B C E 37. gr. 25′. Si addatur angulus C B E 52. gr. 35′. angulo A B E 63. gr. 38′. aggregatum eſt angulus A B C 116. gr. 13′.

BIBLIOTECA NAZ. VITTORIO EMANUELE ROMA

*Aliter.*

Addantur invicem latera data, & ex ſemiſſe aggregati eorundem aufer quodlibet latus angulo quæſito interjacens, ut habeantur differentiæ eorundem. Eritque

1. *Vt latus quodlibet angulo quæſito interjacens,*
*Ad quamlibet differentiam inventam;*
*Sic altera differentia,*
*Ad numerum quartum.*

2. *Vt latus alterum angulo quæſito interjacens,*
*Ad Sinum totum;*
*Ita quartus numerus inventus,*
*Ad ſeptimum.*

Septimo hoc numero ducto in Sinum totum, Radix quadrata producti erit Sinus ſemiſſis anguli quæſiti.

Vel faciliùs per Logarithmos, adde Logarithmum Sinûs totius Logarithmo ſeptimi numeri, ſemiſſis ſummæ erit Logarithmus Sinûs dimidij anguli quæſiti.

EXEMPLI GRATIA. In Triangulo præcedenti quæratur angulus A B C.

| | | |
|---|---|---|
| Lat. | A C | 1277 |
| | A B | 865 |
| | B C | 632 |
| Summa lat. | | 2774 |
| Semiſſis ſu. | | 1387 |

| | | | |
|---|---|---|---|
| Differ. A B 522 | | Logarithmus | 2.7176705 |
| Differ. B C 755 | | Logarithmus | 2.8779479 |
| | | Summa | 5.5956174 |
| Logarithmus A B 865 | | | 2.9370161 |
| Logarithmus quarti cum Sinu toto | | | 12.6586013 |
| Logarithmus B C 632 | | | 2.8007171 |
| Logarithm. ſeptimi cum Sinu toto | | | 19.8578842 |
| Semiſſis eſt Logar. Sinûs 58. gr. 6½ | | | 9.9289421 |

Duplum ejuſdem 116. gr. 13′. eſt Angulus quæſitus A B C.

Vel adde complementa Arithmetica Logarithmorum laterum angulum quæſitum comprehendentium Logarithmis differentiarum inventarum: ſemiſſis ſummæ erit Logarithmus Sinûs dimidij anguli quæſiti. Vt in eodem Triangulo.

| | | *Logarithmi.* | |
|---|---|---|---|
| Lat. | A B 865 | 7.0629839 | compl. Arith. |
| | B C 632 | 7.1992829 | compl. Arith. |
| Differ. A B 522 | | 2.7176705 | |
| Differ. B C 755 | | 2.8779469 | |
| Summa - - | | 19.8578842 | |
| Semiſſis ſummæ | | 9.9289421 | vt ſuprà. |

IV. PROP. Datis angulis & uno latere, invenire alterutrum quodlibet latus.

*Vt Sinus anguli dato lateri oppoſiti,*
*Ad latus datum;*
*Ita Sinus anguli lateri quæſito oppoſiti,*
*Ad latus quæſitum.*

V. PROP. Datis duobus lateribus & angulo interjacente; invenire tertium latus.

*Quære primùm angulos per II. Prop. hujus Capitis, deinde latus quæſitum per præcedentem IV. Prop.*

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## CAPVT IV.

### *De calculo Triangulorum Sphæricorum rectangulorum.*

#### OBSERVATIONES.

1. SI crus unum eſt quadrans, angulus eidem oppoſitus, erit rectus: ſi quadrante minus, acutus: ſi majus, obtuſus: & contrà.

2. Si crus unum eſt quadrans, hypotenuſa etiam erit quadrans: ſi ambo ſunt quadrante majora vel minora, hypotenuſa erit quadrante minor: ſi verò crus unum eſt quadrante majus, & alterum minus, hypotenuſa erit quadrante major; & contrà.

3. Si angulus unus hypotenuſæ adjacens eſt rectus,

ctus, hypotenuſa erit quadrans: ſi ambo iſti ſint acuti vel obtuſi, hypotenuſa erit quadrante minor: ſi verò alteruter eſt obtuſus, alter acutus, hypotenuſa erit quadrante major, & contrà.

4. Cujuſcumque Trianguli Sphærici tres anguli ſunt duobus rectis majores.

I. PROP. Datis angulo obliquo & crure ipſi adjacente, invenire alterum angulum obliquum.

*Vt Sinus totus,*
*Ad Sinum dati anguli obliqui;*
*Ita Sinus complementi cruris dati,*
*Ad Sinum complementi anguli quæſiti.*

II. PROP. Datis uno crure & angulo obliquo eidem oppoſito, invenire alterum angulum obliquum: *Si cognoſcitur ſitne acutus vel obtuſus: vel ſi hypotenuſa, vel alterum crus, eſt quadrante minus vel majus.*

*Vt Sinus complementi cruris dati,*
*Ad Sinum complementi anguli dati;*
*Ita Sinus totus,*
*Ad Sinum anguli quæſiti.*

Aliter.

*Vt Sinus totus,*
*Ad Secantem cruris dati,*
*Ita Sinus complementi anguli dati,*
*Ad Sinum anguli quæſiti.*

III. PROP. Datis hypotenuſâ & uno crure, invenire angulum iſti cruri oppoſitum.

*Vt*

*Vt Sinus hypotenuſæ,*
*Ad Sinum totum;*
*Ita Sinus cruris dati,*
*Ad Sinum anguli quæſiti.*

Aliter.

*Vt Sinus totus,*
*Ad Secantem complementi hypotenuſæ;*
*Ita Sinus cruris dati,*
*Ad Sinum anguli quæſiti.*

IV. PROP. Datis cruribus, invenire quemlibet angulum obliquum.

*Vt Sinus totus,*
*Ad Sinum cruris angulo quæſito adjacentis;*
*Sic Tangens complementi alterius cruris,*
*Ad Tangentem complementi anguli quæſiti.*

V. PROP. Datis hypotenuſâ, & uno crure, invenire angulum interjacentem.

*Vt Sinus totus,*
*Ad Tangentem complementi hypotenuſæ;*
*Sic Tangens cruris dati,*
*Ad Sinum complementi anguli quæſiti.*

VI. PROP. Datis hypotenuſâ, & angulo obliquo, invenire alterum angulum obliquum.

*Vt Sinus totus,*
*Ad Sinum complementi hypotenuſæ;*
*Sic Tangens anguli obliqui dati,*
*Ad Tangentem complementi anguli quæſiti.*

VII.

VII. PROP. Datis hypotenuſâ, & angulo obliquo, invenire crus iſti angulo oppoſitum.

*Ut Sinus totus,*
*Ad Sinum hypotenuſæ,*
*Ita Sinus anguli obliqui dati,*
*Ad Sinum cruris quæſiti.*

VIII. PROP. Datis hypotenuſâ & uno crure, invenire alterum crus.

*Ut Sinus complementi cruris dati,*
*Ad Sinum complementi hypotenuſæ,*
*Ita Sinus totus,*
*Ad Sinum complementi cruris quæſiti.*

Aliter.

*Ut Sinus totus,*
*Ad Secantem cruris dati,*
*Ita Sinus complementi hypotenuſæ,*
*Ad Sinum complementi cruris quæſiti.*

IX. PROP. Datis angulis, invenire quodlibet crus.

*Ut Sinus anguli cruri quæſito adjacentis,*
*Ad Sinum totum;*
*Ita Sinus complementi alterius anguli obliqui,*
*Ad Sinum complementi cruris quæſiti.*

Aliter.

*Ut Sinus totus,*
*Ad Secantem compl. anguli obliqui cruri quæſito adjacentis;*
*Ita Sinus complementi alterius anguli obliqui,*
*Ad Sinum complementi cruris quæſiti.*

X. PROP.

X. Prop. Datis uno crure & angulo obliquo eidem adjacente, invenire alterum crus.

*Vt Sinus totus,*
*Ad Sinum cruris dati;*
*Sic Tangens anguli obliqui dati,*
*Ad Tangentem cruris quæſiti.*

XI. Prop. Datis uno crure & angulo obliquo eidem oppoſito, invenire alterum crus: *Modò ſciatur sítne hoc, vel hypotenuſa quadrante minor vel major: vel sítne alter angulus obliquus acutus vel obtuſus.*

*Vt Sinus totus,*
*Ad Tangentem compl. anguli obliqui dati:*
*Sic Tangens cruris dati,*
*Ad Sinum cruris quæſiti.*

XII. Prop. Datis hypotenusâ & angulo obliquo, invenire crus iſti angulo adjacens.

*Vt Sinus totus,*
*Ad Sinum complementi anguli obliqui dati:*
*Sic Tangens hypotenuſæ,*
*Ad Tangentem cruris quæſiti.*

XIII. Prop. Datis angulis, invenire hypotenuſam.

*Vt Sinus totus,*
*Ad Tangentem compl. cujuſlibet anguli obliqui,*
*Sic Tangens complementi alterius anguli obliqui,*
*Ad Sinum complementi hypotenuſæ.*

XIV. PROP. Datis cruribus, invenire hypotenuſam.

*Vt Sinus totus.*
*Ad Sinum complementi cujuſlibet cruris:*
*Ita Sinus complementi alterius cruris,*
*Ad Sinûm complementi hypotenuſæ.*

XV. PROP. Datis uno crure & angulo obliquo iſti cruri oppoſito, invenire hypotenuſam: *Modò ſciatur sítne hæc vel alterum crus quadrante minus vel majus: vel sítne alter angulus obliquus acutus vel obtuſus.*

*Vt Sinus anguli obliqui dati,*
*Ad Sinum totum;*
*Ita Sinus cruris dati,*
*Ad Sinum hypotenuſæ.*

Aliter.

*Vt Sinus totus,*
*Ad Secantem compl. anguli obliqui dati,*
*Ita Sinus cruris dati,*
*Ad Sinum hypotenuſæ.*

XVI. PROP. Datis uno crure & angulo obliquo iſti cruri adjacente, invenire hypotenuſam.

*Vt Sinus totus,*
*Ad Sinum compl. anguli obliqui dati;*
*Sic Tangens complementi cruris dati,*
*Ad Tangentem complementi hypotenuſæ.*

# CAPVT V.

## *De calculo Triangulorum Sphæricorum obliquangulorum.*

VT reſolvatur maxima pars Triangulorum Sphæricorum obliquangulorum, reducuntur ea in duo Triangula rectangula ope perpendicularis, ductæ ab extremitate lateris dati habentis ad alteram extremitatem angulum datum, in baſin, productam ſi opùs eſt: Et tùm inveniuntur termini quæſiti per terminos datos Triangulorum rectangulorum. Quia autem modus per inventionem perpendicularis, (qui tres ad minimum operationes requirit,) communis eſt, & fieri poteſt per Propoſitiones præcedentes, eum declarare prætermittemus; ſed monſtrabimus, quomodo Triangula reſolventur ſine inventione perpendicularis duabus ſolummodò operationibus: Et vice multorum verborum eas exprimendi, id breviter faciemus per litteras. Qui demonſtrationes hujus videre cupiunt, eas invenient in *Trigonometriâ Britannicâ Henrici Briggij.*

Hoc ut præſtes ſecundùm ſequentes analogias, dato Triangulo appone litteras A, B, C. Litteram A, angulo ex quo perpendicularis ducenda eſt. B, angulo dato lateri dato adjacenti. Et C, tertio angulo: & ubi perpendicularis baſim dividit ad angulos rectos, ſcribe litteram D. Angulis ita notatis, latera cujuſvis Trianguli etiam notata erunt.

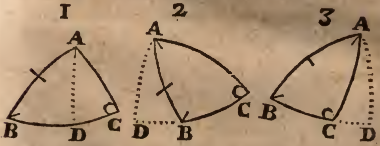
Si

Si anguli B, & C, ( baſim B C tangentes ) ſunt acuti, perpendicularis intra Triangulum cadet. Si B eſt obtuſus, extrà ultra B. Si C eſt obtuſus, extrà ultra C.

## NOTA.

*Quoniam diximus perpendicularem ducendam eſſe ab extremitate lateris dati habentis ad alteram extremitatem angulum datum, atque id aliquando ( veluti in* 1. 4. *&* 9. *Prop.) duobus modis fieri poteſt: ideò in* 4. *&* 12. *Prop. monebimus unde perpendicularis neceſſariò in hoc caſu erit educenda. In duabus alteris id indifferenter fieri poteſt.*

I. PROP. Datis duobus angulis & latere interjacente, invenire tertium angulum.




1. *Vt Sinus totus,*
*Ad Sinum complementi* A B
*Sic Tangens* A B C
*Ad Tangentem complementi* B A D

Invento B A D, cognoſcitur C A D.

2. *Vt Sinus,* B A D
*Ad Sinum* C A D

*Ita*

*Ita Sinus complementi* A B C
*Ad Sinum complementi* A C D

## N O T A.

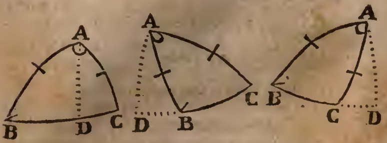
In primo & ſecundo Triangulo A C D, idem eſt qui ACB, ſed in tertio, invento A C D ſumendum eſt ejus complementum ad 180.gr. ut habeatur angulus A C B.

Ad monſtrandam facilitatem calculi per has proportiones, dabimus exemplum cum breviſſimo operandi modo.

In primo Triangulo obliquangulo B A C, detur angulus B A C 104. gr. ó. Angulus A B C 38. gr.ó.& latus A B 30.gr.ó. Quæritur angulus ACB.

| 1. | | *Logarith.* | 2. *Logarith.* | |
|---|---|---|---|---|
| A B 30 g. 6. | Sin.compl. | 9.9375306 | Si.co. | 9.8965321 |
| ABC 38 g. ó. | Tangens | 9 8928098 | Sin. | 0.0818525 a.c. |
| BAD 55 g.55′. | Tan.com. | 19.8303404 | Sin. | 9.8716414 |
| CAD 48 g. 5′. | . . . . . . . . . . . . | | Si.co. | 19.8500260 |
| ACB 44 g.56′. | . . . . . . . . . . . . | | | |

II. PROP. Datis duobus lateribus, & angulo alterutri eorum oppoſito, invenire angulum ab iis comprehenſum.

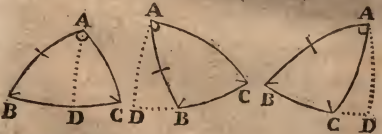


| | |
|---|---|
| *1. Vt Sinus totus,* | |
| *Ad Sinum complementi* | A B |
| *Sic Tangens* | A B C |
| *Ad Tangentem complementi* | B A D |

| | |
|---|---|
| *2. Vt Tangens* | A C |
| *Ad Tangentem* | A B |
| *Ita Sinus complementi* | B A D |
| *Ad Sinum complementi* | C A D |

Si perpendicularis cadit intra Triangulum, ſumma B A D, C A D: ſi extra, differentia eorum eſt angulus quæſitus B A C.

III. PROP. Datis duobus angulis, & latere alterutri eorum oppoſito, invenire tertium angulum: *Modò ſciatur ſi eſt acutus vel obtuſus: vel ſi ſpecies lateris alteri angulo dato oppoſiti cognoſcitur.*




| | |
|---|---|
| *1. Vt Sinus totus* | |
| *Ad Sinum complementi* | A B |
| *Sic Tangens* | A B C |
| *Ad Tangentem complementi* | B A D |

| | |
|---|---|
| *2. Vt Sinus complementi* | A B C |
| *Ad Sinum complementi* | B C A |

I *Ita*

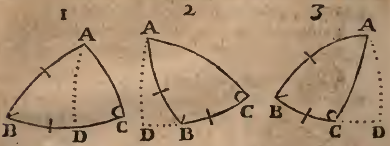
| | |
|---|---|
| *Ita Sinus* | B A D |
| *Ad Sinum* | C A D |

Si perpendicularis cadit intra Triangulum, ſumma B A D, C A D: ſi extra, differentia eorum eſt angulus quæſitus B A C.

I V. PROP. Datis duobus lateribus, & angulo ab iis comprehenſo, invenire quemlibet alterum angulum.

NOTA.

In hoc caſu perpendicularis neceſſariò ducenda eſt à latere angulo quæſito oppoſito.




| | |
|---|---|
| 1. *Vt Sinus totus,* | |
| *Ad Sinum complementi* | A B C |
| *Sic Tangens* | A B |
| *Ad Tangentem* | B D |

Invento B D, cognoſcitur C D.

| | |
|---|---|
| 2. *Vt Sinus* | C D |
| *Ad Sinum* | B D |
| *Sic Tangens* | A B C |
| *Ad Tangentem* | A C D |

NOTA.

NOTA.

In primo & ſecundo Triangulo, angulus A C D idem eſt qui A ⌣ B: at in tertio, invento A C D ſumendum eſt ejus complementum ad 180. gr. ut habeatur angulus quæſitus A C B.

V. PROP. Datis duobus lateribus & angulo uni eorum oppoſito, invenire angulum alteri oppoſitum: *Modò ſciatur sítne acutus an obtuſus.*

*Vt Sinus lateris dato angulo oppoſiti,*
*Ad Sinum anguli dati;*
*Ita Sinus alterius lateris dati,*
*Ad Sinum anguli quæſiti.*

VI. PROP. Datis tribus lateribus, invenire quemlibet angulorum.

Addantur tria latera, & ex ſemiſſe ſummæ eorum auferatur utrumque latus angulum quæſitum comprehendens, ut habeantur eorum differentiæ; Eritque.

1. *Vt Sinus cujuſlibet lateris angulum quæſitum comprehendentis,*
*Ad Sinum cujuſlibet differentiæ inventæ;*
*Ita Sinus alterius differentiæ,*
*Ad Sinum quartum.*

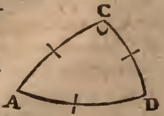
2. *Vt Sinus alterius lateris angulum quæſitum comprehendentis;*
*Ad Sinum totum;*
*Sic quartus Sinus,*
*Ad ſeptimum Sinum.*

Septimo hoc Sinu ducto in Sinum totum, Radix quadrata producti erit Sinus ſemiſſis anguli quæſiti.

Vel faciliùs per Logarithmos : adde Logarithmum Sinûs totius Logarithmo Sinûs ſeptimi; ſemiſſis ſummæ erit Logarithmus Sinûs ſemiſſis anguli quæſiti.

Vel adde complementa Arithmetica Logarithmorum Sinuum laterum angulum quæſitum comprehendentium, Logarithmis Sinuum differentiarum inventarum : ſemiſſis ſummæ erit Logarithmus Sinûs ſemiſſis anguli quæſiti. Vide exemplum.

In Triangulo A C D, dantur latera A D 42. gr. 8′. A C 30. gr. 0. & C D 25. gr. 4′. quæritur angulus A C D.




| | | | | |
|---|---|---|---|---|
| Lat. | A D | 42. gr. 8′ | *Compl. Arith.* | |
| | A C | 30. gr. 0 | 0.3010300 | |
| | C D | 24. gr. 4 | 0.3895535 | |
| Sum. lat. | | 96. gr. 12 | | |
| Semiſſ. ſum. | | 48. gr. 6 | *Logarithmi.* | |
| Differ. A C | | 18. gr. 6 | 9.4923083 | |
| Differ. C D | | 24. gr. 2 | 9.6098803 | |
| Summa | - - - | | 19.7927721 | |
| Semiſſ. ſum. eſt | | 51.58′ | 9.8963860 | |
| Duplum eſt | | 103.56′ | A C D. | |

VII.

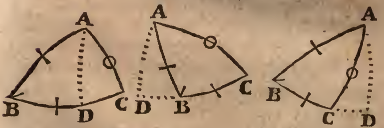
VII. Prop. Datis angulis, invenire quodlibet latus.

*Si anguli mutentur in latera eorum oppoſita, & vel majoris anguli & lateris ei oppoſiti complementum ad 180.gr.operatio eadem erit quæ in præcedenti Prop.*

VIII. Prop. Datis duobus angulis,& latere uni eorum oppoſito, invenire latus alteri oppoſitum : *Modò ſciatur ſitne quadrante minus vel majus.*

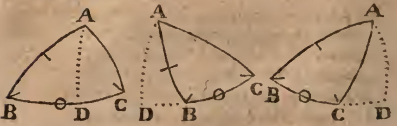
*Vt Sinus anguli lateri dato oppoſiti,*
*Ad Sinum ejuſdem lateris,*
*Ita Sinus alterius anguli dati,*
*Ad Sinum lateris quæſiti.*

IX. Prop. Datis duobus lateribus & angulo ab iis comprehenſo, invenire tertium latus.




| | |
|---|---|
| 1. *Vt Sinus totus,* | |
| *Ad Sinum complementi* | ABC |
| *Sic Tangens* | AB |
| *Ad Tangentem* | BD |
| Invento BD, cognoſcitur CD. | |
| 2. *Vt Sinus complementi* | BD |
| *Ad Sinum complementi* | CD |
| *Ita Sinus complementi* | AB |
| *Ad Sinum complementi* | AC |

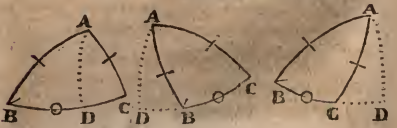
X. PROP. Datis duobus angulis, & latere uni eorum oppoſito, invenire latus interjacens angulis datis : *Modo ſciatur ſitne latus quæſitum, vel latus alteri angulo dato oppoſitum, quadrante minus vel majus.*




| | |
|---|---|
| 1. *Vt Sinus totus,* | |
| *Ad Sinum complementi* | A B C |
| *Sic Tangens* | A B |
| *Ad Tangentem* | B D |
| 2. *Vt Tangens* | A C B |
| *Ad Tangentem* | A B C |
| *Ita Sinus* | B D |
| *Ad Sinum* | C D |

Si perpendicularis cadit intra Triangulum, ſumma B D, C D : ſi extra, differentia eorum eſt latus quæſitum B C.

XI. PROP. Datis duobus lateribus, & angulo uni eorum oppoſito, invenire tertium latus.



| | |
|---|---|
| 1. *Vt Sinus totus,* | |
| *Ad Sinum complementi* | A B C |
| *Sic Tangens* | A B |
| *Ad Tangentem* | B D |

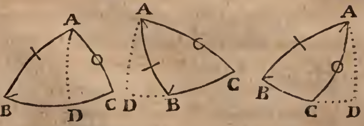
| | |
|---|---|
| 2. *Vt Sinus complementi* | A B |
| *Ad Sinum complementi* | A C |
| *Ita Sinus complementi* | B D |
| *Ad Sinum complementi* | C D |

Si perpendicularis cadit intra Triangulum, ſumma B D, C D; ſi extra, differentia eorum erit latus quæſitum B C.

XII. PROP. Datis duobus angulis, & latere interjacente, invenire quodlibet alterum latus.

## NOTA.

In hoc caſu perpendicularis neceſſariò ducenda eſt ex angulo dato, lateri quæſito adjacente.




| | |
|---|---|
| 1. *Vt Sinus totus,* | |
| *Ad Sinum complementi* | A B |
| *Sic Tangens* | A B C |
| *Ad Tangentem complementi* | B A D |

Invento B A D, cognoſcitur C A D.

| | |
|---|---|
| 2. *Vt Sinus complementi* | C A D |
| *Ad Sinum complementi* | B A D |
| *Sic Tangens* | A B |
| *Ad Tangentem* | A C |

# APPENDIX

## *De Quæſtionibus Aſtronomicis.*

I. Datis maximâ obliquitate Eclipticæ, & diſtantiâ Solis à proximo Æquinoctio, invenire ejus declinationem.

*Vt Sinus totus,*
*Ad Sinum diſtantiæ Solis à proximo Æquinoctio,*
*Ita Sinus maximæ obliquitatis,*
*Ad Sinum declinationis quæſitæ.*

II. Datis maximâ obliquitate Eclipticæ, & declinatione Solis, invenire ejus locum in Eclipticâ.

*Vt Sinus maximæ obliquitatis Eclipticæ,*
*Ad Sinum declinationis Solis,*
*Ita Sinus totus,*
*Ad Sinum diſtantiæ Solis à proximo Æquinoctio.*

Maxima obliquitas Eclipticæ inventa fuit à Tycho-Brahe 23. gr. 31. 30′. ſupra quam idcircò pro exactis operationibus operandum eſt.

III.

III. Datis maximâ obliquitate Eclipticæ, & diſtantiâ Solis à proximo Æquinoctio, invenire ejus Aſcenſionem rectam.

*Vt Sinus totus,*
*Ad Sinum complementi maximæ obliquitatis;*
*Sic Tangens diſtantiæ Solis à proximo Æquinoctio,*
*Ad Tangentem Aſcenſionis rectæ quæſita.*

IV. Datis maximâ obliquitate Eclipticæ, & Declinatione Solis, invenire ejus Aſcenſionem rectam.

*Vt Sinus totus,*
*Ad Tangentem Declinationis Solis;*
*Sic Tangens complementi maximæ obliquitatis,*
*Ad Sinum Aſcenſionis rectæ quæſita.*

V. Datis maximâ obliquitate Eclipticæ, & diſtantia Solis à proximo Æquinoctio, invenire angulum quem facit Ecliptica cum Meridiano.

*Vt Sinus totus,*
*Ad Sinum complementi diſtantiæ Solis à proximo Æquinoctio;*
*Sic Tangens maximæ obliquitatis,*
*Ad Tangentem complementi anguli quæſiti.*

VI. Datis maximâ obliquitate Eclipticæ, & Declinatione Solis, invenire angulum quem facit Ecliptica cum Meridiano.

*Vt Sinus complementi Declinationis Solis,*
*Ad Sinum complementi maximæ obliquitatis;*

*Ita Sinus totus,*
*Ad Sinum anguli quæſiti.*

VII. Datis Declinatione Solis, & Elevatione Poli, invenire Solis amplitudinem Orientalem aut Occidentalem.

*Vt Sinus complementi Elevationis Poli,*
*Ad Sinum Declinationis Solis:*
*Ita Sinus totus,*
*Ad Sinum Amplitudinis quæſitæ.*

VIII. Datâ diſtantiâ Solis à proximo Æquinoctio, & maximâ ejus Amplitudine, cæteras invenire.

*Vt Sinus totus,*
*Ad Sinum maximæ Amplitudinis Solis,*
*Ita Sinus ejus diſtantiæ à proximo Æquinoctio,*
*Ad Sinum amplitudinis quæſitæ.*

IX. Datis Declinatione Solis, & Elevatione Poli, invenire differentiam Aſcenſionalem.

*Vt Sinus totus,*
*Ad Tangentem Declinationis Solis:*
*Sic Tangens Elevationis Poli,*
*Ad Sinum differentiæ Aſcenſionalis quæſitæ.*

X. Datis Declinatione Solis, & Elevatione Poli, invenire horam Ortûs Solis aut occaſûs.

*Vt Sinus totus,*
*Ad Tangentem Declinationis Solis,*
*Sic Tangens Elevationis Poli,*
*Ad Sinum complementi arcûs ſeminocturni.*

Arcus

Arcus ſeminocturnus in tempus reductus,dabit horam quâ Sol oritur, qui deductus ex 12 horis, relinquit horam qua occidit.

X I. Datis elevatione Poli, & horâ Solis ortûs & occasûs, invenire ejus Declinationem, & ideò quâ die datâ horâ oritur & decombit.

*Vt Sinus totus,*
*Ad Sinum compl. diſtantiæ Solis à Meridiano,*
*Sic Tangens complementi elevationis Poli,*
*Ad Tangentem declinationis quæſitæ.*

Iam ut inveniatur dies quâ tali Sol oritur & occidit horâ, fiat.

*Vt Sinus maximæ obliquitatis Ecliptica,*
*Ad Sinum declinationis Solis inventæ:*
*Ita Sinus totus,*
*Ad Sinum diſtantiæ Solis à proximo Æquinoctio.*

X I I. Datis elevatione Poli, Declinatione Solis, & horâ diei,invenire altitudinem Solis.

Hæc methodus ſupponit perpendicularem ductam ex Polo Horizontis in circulum horarium Solis.

1. *Vt Sinus totus,*
*Ad Tangentem complementi elevationis Poli,*
*Ita Sinus complementi diſtantiæ Solis à Meridiano,*
*Ad Tangentem primi arcûs inventi.*

Ab horâ ſextâ matutinâ ad ſextam Veſpertinam aufer primum arcum inventum à diſtantiâ Solis à Polo,

Polo, vel eidem adde ab horâ ſextâ Veſpertinâ ad ſextam Matutinam, ut habeatur ſecundus arcus inventus. Fiat poſtmodùm.

2. *Vt Sinus complementi primi arcûs inventi,*
*Ad Sinum complementi ſecundi arcûs inventi;*
*Ita Sinus elevationis Poli,*
*Ad Sinum altitudinis Solis.*

Ad inveniendam altitudinem Solis horâ ſextâ, hrnc ſequitor Analogiam.

*Vt Sinus totus,*
*Ad Sinum Declinationis Solis;*
*Ita Sinus elevationis Poli,*
*Ad Sinum altitudinis quæſitæ.*

Vt habeatur altitudo Solis exiſtentis in Æquatore, fiat.

*Vt Sinus totus,*
*Ad Sinum complementi elevationis Poli,*
*Ita Sinus compl. diſtantiæ Solis à Meridiano,*
*Ad Sinum altitudinis quæſitæ.*

XIII. Datis Azimuth & Declinatione Solis cum horâ diei, invenire altitudinem Solis.

*Vt Sinus Azimuth Solis à Meridiano,*
*Ad Sinum complementi Declinationis Solis,*
*Ita Sinus diſtantiæ Solis à Meridiano,*
*Ad Sinum complementi altitudinis quæſitæ.*

XIV. Datis Declinatione, Altitudine, & Azimuth Solis, invenire horam diei.

*Vt Sinus complementi Declinationis,*
*Ad Sinum complementi Altitudinis;*
*Ita Sinus Azimuth à Meridiano,*
*Ad Sinum diſtantiæ à Meridiano.*

Hæc quæſtio maximè inſervit pro inveniendâ horâ faciliùs quàm per ſequentem, modò habeatur linea Horizontalis Meridiana benè exarata, vel Magnes accuratus: quia obſervando ope umbræ Perpendiculi angulum Azimuthalem ſimul & altitudinem Solis, hora innoteſcet unicâ analogiâ.

XV. Datis Elevatione Poli, Declinatione, & Altitudine Solis, invenire horam diei.

Adde hæc tria: complementum elevationis Poli, diſtantiam Solis à Polo, & complementum altitudinis Solis; & à dimidiâ eorum ſummâ aufer complementum elevationis Poli, & diſtantiam Solis à Polo, ut habeantur eorum differentiæ. Eritque

1. *Vt Sinus complementi elevationis Poli,*
*Ad Sinum cujuſlibet differentiæ inventæ,*
*Ita Sinus alterius differentiæ inventæ,*
*Ad Sinum quartum.*

2. *Vt Sinus diſtantiæ Solis à Polo,*
*Ad Sinum totum,*
*Ita Sinus quartus inventus,*
*Ad Sinum ſeptimum.*

Adde Logarithmum Sinûs totius Logarithmo Sinûs ſeptimi; ſemiſſis ſummæ erit Logarithmus

Sinûs

Sinûs arcûs, qui duplicatus & in horas reductus dabit diſtantiam à Meridie.

Vel adde complementa Arithmetica Logarithmorum Sinûs complementi elevationis Poli, & Sinûs diſtantiæ Solis à Polo, Logarithmis Sinuum differentiarum inventarum: ſemiſſis ſummæ erit Logarithmus Sinûs arcûs, qui duplicatus & in horas reductus dabit diſtantiam à Meridie.

Hæc quæſtio maximè uſu venit, reſolvitúrque per 6 Prop. Cap. 5. nam in Triangulo A B C tria latera dantur.

C, eſt Polus.
A, Zenith.
B, Aſtrum.
A C, complementum elevationis Poli C K.
A B, complementum altitudinis Solis B H.




B C, diſtantia Solis à Polo, quæ habetur ſubducendo ejus declinationem ex gr. 90. (ſi ſit Borealis) vel eam addendo gr. 90, (ſi Auſtralis,) quando Latitudo Loci erit Septentrionalis: contrario modo erit operandum, ubi Latitudo erit Auſtralis.

*Quæritur* angulus A C B, ſeu diſtantia Aſtri B, à Meridiano I A, quæ menſuratur per arcum Æquatoris I L, qui reducitur in horas eum dividendo per 15.

Porrò reſolvitur hæc quæſtio faciliùs per ultimum modum, utpotè per complementa Arithmetica, quàm per alias operationes.

*Datis*

*Datis Elevatione Poli, Altitudine, & Declinatione ſtellæ, horam nocturnam invenire.*

Operandum eſt ſicuti pro Sole, ut habeatur angulus A C B, ſeu diſtantia Stellæ à Meridiano, quæ ab ejus Aſcenſione rectâ venit auferenda (ſi obſervatio facta fuerit in Quadrante Orientali) vel addenda (ſi operatio facta fuerit in Quadrante Occidentali) dabitúrque Aſcenſio recta medij Cæli; ex quâ tandem (auctâ gr. 360. ſi ſubtractio fieri nequit) ſi adimatur Aſcenſio recta Solis, relinquetur ejus diſtantia à Meridie præterito, quæ in tempus reducta dabit horam quæſitam.

*Dato loco Solis, & elevatione Poli, invenire horam initij auroræ, & finis crepuſculi veſpertini.*

Quandoquidem determinatur utplurimùm magnitudo crepuſculorum tempore quo Sol ſub Horizonte latet uſque ad 18. gr. cùm certò conſtet tantundem temporis inſumere in deſcenſu à 18. gr. uſque ad Horizontem, quantùm ab Horizonte uſque ad 18. gr. quod eſt Crepuſculum Veſpertinum, nec ſecùs manè in aſcenſu.

Hinc fit, ut datâ horâ quâ Sol totidem gradibus infra Horizontem latet, & notâ horâ ejus ortûs & occaſûs per quæſt. 10. eorum differentia ſit magnitudo crepuſculi, quæ ab horâ Solis ortûs ablata dabit initium auroræ, addita verò horæ Solis occaſûs dabit finem crepuſculi veſpertini.

XVI.

XVI. Datis elevatione Poli, Declinatione & altitudine Solis, invenire ejus Azimuth.

Adde hæc tria: complementum elevationis Poli, diſtantiam Solis à Polo, & complementum altitudinis Solis: & ex ſemiſſe ſummæ eorum aufer complementum elevationis Poli, & complementum altitudinis Solis, ut habeantur eorum differentiæ: Eritque

1. *Ut Sinus complementi elevationis Poli,*
*Ad Sinum cujuſlibet differentiæ inventæ;*
*Ita Sinus alterius differentiæ,*
*Ad Sinum quartum.*

2. *Ut Sinus complementi altitudinis Solis,*
*Ad Sinum totum;*
*Ita Sinus quartus inventus,*
*Ad Sinum ſeptimum.*

Adde Logarithmum Sinûs totius Logarithmo Sinûs ſeptimi: ſemiſſis ſummæ eorum erit Logarithmus Sinûs ſemiſſis Azimuth quæſiti à parte Septentrionali Meridianâ.

Vel adde complementa Arithmetica Logarithmorum Sinûs complementi elevationis Poli, & Sinûs complementi altitudinis Solis, Logarithmis Sinuum differentiarum inventarum: ſemiſſis ſummæ erit Logarithmus Sinûs ſemiſſis Azimuth quæſiti à parte Septentrionali Meridianâ.

Solutio hujus Quæſtionis eſt eadem quæ Prop. 15. datis in figurâ antecedenti tribus lateribus Trianguli A B C. Inventi enim anguli C A B complementum

mentum BAI vel HAM dabit Azimuth Solis à Meridiano.

Maximæ eſt utilitatis in *Gnomonicâ*, & *declinatione Magnetis.* Obſervatâ enim Solis altitudine poteſt eodem tempore notari umbra perpendiculi in Plano Horizontali : tùm invento Azimuthali Solis angulo, eóque ſupra dictum Planum exarato, dabitur vel *linea Meridiana* vel *lineâ ortûs & occaſûs Æquinoctialis* ( prout anguli CAB fuerit aſſumptum complementum ad 180. gr. vel ad 90. ) unde patebit declinatio Magnetis.

Ad conſtruendas Tabulas Azimuthorum ( inſervientes Gnomonicæ & Horologiis acu Magneticâ inſtructis ) ſuffecerit impoſuiſſe initia Signorum. D. Henrion ejuſmodi Tabulas pro pluribus Poli elevationibus accommodavit in ſuo tractatu de Triangulis Sphæricis.

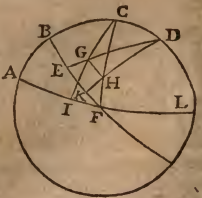
Vt inveniatur Azimuth Solis horâ ſextâ, hanc ſequere proportionem.

*Vt Sinus totus,*
*Ad Sinum complementi elevationis Poli;*
*Sic Tangens Declinationis Solis,*
*Ad Tangentem Azimuth Solis Orientis vel Occidentis ad Septentrionem.*

Ad inveniendum Azimuth Solis exiſtentis in Æquatore, hanc ſequitor analogiam.

*Vt Sinus totus,*
*Ad Tangentem elevationis Solis,*
*Sic Tangens elevationis Poli,*
*Ad Sinum complementi Azimuth Solis à Meridiano.*

XVII. Datis duabus altitudinibus Solis vel cujuſvis alterius Aſtri (cujus nota ſit Declinatio) diù vel noctu obſervatis, unà cum differentiâ earum Azimuthali, invenire elevationem Poli, & earum Azimuth.




A B C D eſt Meridianus.
C Zenith, & D Polus.
B E F Æquator.
A I L Horizon.
G & H loci Solis, vel ſtellæ.
G E, & H K eorum Declinatio.
G I, & H F eorum Altitudo.
I F differentia Azimuthalis.

Quæritur elevatio Poli D L, & arcus Horizontis L F, vel A I, vel A F.

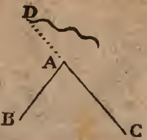
Quoniam in Triangulo G C H, duo latera G C, H C (complementa altitudinum I G, F H) & angulus G C H (utpotè arcus I F) nota ſunt, arcus G H, & angulus G H C etiam non latebunt.

Verùm in Triangulo G D H, lateribus G D, H D, (complementis Declinationum G E, H K) & arcu G H notis, innoteſcet etiam angulus G H D, unde auferendo inventum angulum G H C, reſtabit angulus C H D. Iam in Triangulo C H D duobus datis lateribus H C, H D, & angulo ad iis comprehenſo C H D, dabitur etiam latus

latus C D cujus complementum D L erit *Elevatio Poli.* Dabitur etiam angulus D C H ſeu arcus Horizontis F H,cujus complementum A F ad gr.180. eſt angulus lineæ Meridianæ cum Azimuth Aſtri exiſtentis in H. Si verò ejuſdem arcûs F L capiatur tantùm cumplementum ad gr.90. dabitur Azimuth lineæ Orientalis, Septentrionale quidem, ſi præfatus arcus F L ſit minor gr.90. Auſtrale verò ſi major.

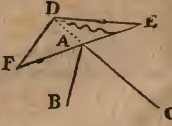
Hæc quæſtio facilè ſolvi poteſt ope circini in Globo, ubi circuli Azimuthales & Almucantarat ſunt exarati, figendo alteram circini cuſpidem (diducti gradibus H D) in punctis H, G,& duos ex iis arcus deſcribendo, qui ſibi mutuò occurrent in puncto D, ex quo, ut Polo,patefiet altitudo D L & arcus F L.

Non modicæ eſt utilitatis pro *declinatione Magnetis*, quia obſervando angulum alicujus dictorum Azimuthorum cum Acu Magneticâ, ſcitur angulus quem facit cum Meridianâ, quando poſteà erit inventa,quòd fierit nequit niſi per Amplitudines, vel per lineam Meridianam, quæ ſuper Mari non habetur.




Nec minùs etiam inſervit *Gnomonica* in Planis Horizontalibus, ſed multò magis in aliis quibuſlibet Planis per duas obſervationes umbræ B, C, verticis alicujus ſtyli D, ex cujus incidentiâ A junctæ duæ rectæ AB, AC dabunt angulum ſeu differentiam Azi-

muthalem BAC. Iam longitudo utriuſque umbræ, & ſtyli altitudo AD dabit in punctis B & C altitudinem Solis ſupra dictum Planum tempore utriuſque obſervationis.




His ita præordinatis ad quæſtionis terminos deventum eſt, quibus invenietur angulus lineæ Meridianæ Plani (quæ *linea Subſtylaris* appellatur) cum alterutro Azimutho A B vel A C, quà Meridianâ in Plano ſecundùm inventum ejus angulum delineatâ, ut F A E, & ad eam erecto perpendiculari ſtylo A D, fiat angulus A D E æqualis com lemento elevationis Poli ſupra Planum (quam ex dictis antè invenies,) ut habeatur in E verus Polus ſeu Horologij centrum in hoc Plano, unde ductâ verâ Meridianâ lineâ, & radio Æquatoris D F, eò deventum erit, ut jam facilis erit Horologij conſtructio, & poteris illicò ſcire (ſi vis) Latitudinem Loci, declinationem Plani, &c. Verùm judicio opùs eſt in determinandâ Plani declinatione, inclinatione, & cæteris ſi quæ ſint, ſecundum Gnomonicæ leges, quas nimis durum foret hîc ſigillatim exprimendo deſcribere.

XVIII. Datis elevatione Poli & diſtantiâ Solis à Meridiano (quæ eſt hora) invenire arcum Horizontis comprehenſum inter Meridianum & circulum Horarium Solis.

*Vt radius,*

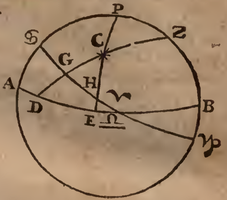
*Ad Sinum elevationis Poli,*

*Sic*

*Sic Tangens diſtantiæ Solis à Meridiano.*
*Ad Tangentem arcûs quæſiti.*

Hinc facilis conſtructio Horologij cujuſlibet Horizontalis, quia hi arcus Horizontis angulis linearum Horariarum cum Meridianâ phyſicè ſunt æquales.

XIX. Datis Longitudine & Latitudine ſtellæ fixæ, invenire ejus Declinationem.




A E B eſt Æquator.
P Polus Æquatoris.
♋. ♈. ♎. ♑. Zodiacus.
Z Podus Zodiaci.
A P Z Colurus Solſtitiorum.
C ſtella data, cujus Longitudo G ♈, & Latitudo G C dantur. Quæritur ejus Declinatio C E.

Arcus P Z notus eſt 23.gr.31. 30'. utpotè diſtantia Poli Zodiaci à Polo Æquatoris, Z C etiam patet, complementum videlicet Latitudinis G C. Et angulus P Z C. ab iis comprehenſus etiam patet, diſtantia nimirùm ſtellæ à Coluro noto, quæ menſuratur ab arcu G ♋, qui eſt complementum noti arcûs G ♈. Ideò arcus P C patefiet, cujus complementum C E eſt declinatio quæſita.

XX.

X X. Datis Longitudine & Latitudine ſtellæ fixæ, invenire ejus Aſcenſionem rectam.

In Schemate antecedenti, arcus Æquatoris ♈ E eſt Aſcenſio recta quæſita. In Triangulo C P Z, datis duobus lateribus P Z, C Z, & angulo ab iis comprehenſo, dabitur angulus Z P C, qui metitur arcum E B, cujus complementum eſt quæſitus arcus ♈ E. Quandoque arcus E B erit quadrante minor, ſed ſemper arcus ♈ E eſt complementum ipſius anguli Z P C. Cætera ingenioſus Lector facilè animadvertet.

*Per Declinationes ſtellarum cognoſcuntur,*

1. Elevatio Poli per maximam earum Altitudinem.
2. Amplitudines ortivæ, proindéque declinatio Magnetis.
3. Faciliùs in Aſtrolabiis collocantur.
4. Segmenta Parallelorum ipſarum ſubter & ſuper Horizontem.
5. Quantùm longè vel propè à Zenith abſint.
6. Quæ nunquam, vel ſemper ſub Horizonte latent.

*Per Aſcenſiones ſtellarum cognoſcuntur,*

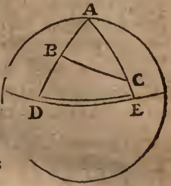
1. Tempus quo antecedunt vel ſequuntur Solem.
2. Quandò ſunt ſub Meridiano, ut fiat earum obſervatio.
3. Faciliùs ſuper Globos & Aſtrolabia collocantur.

Tandem per Declinationem, Aſcenſionem rectam,

ctam, & Altitudinem ſtellæ alicujus fixæ ſcitur hora nocturna, ut antè dictum eſt.

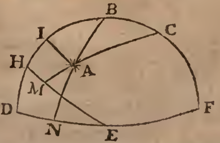
Habes Tabulas Aſcenſ. Declin. Mediat. Long. & Lat.ſtellarum in Sphæricis D.Henrion,& apud alios Autores.

XXI. Datis Longitudinibus & Latitudinibus duarum ſtellarum aut vrbium, invenire earum diſtantiam, ſeu arcum magni circuli inter eas comprehenſum.




B,C ſunt loca ſtellarum vel urbium.
A Polus.
BD & EC Latitudines datæ.
DE differentia Longitudinum.
Igitur in Triangulo ABC, datis duobus lateribus AB, AC, & angulo A ab iis comprehenſo, cujus menſura eſt arcus DE notus, dabitur etiam arcus BC per 9. Prop. Obliquangulorum.

XXII. Datis Declinatione Solis, Elevatione Poli,& angulo Azimuthali,quo habetur linea Meridiana, invenire horam.




DBF eſt Meridianus.
B Zenith.
C Polus.
DEF Horizon.
HE Æquator.
I A, Parallelus Solis A.

Notâ

Notâ Declinatione AM, ejus complementum AC etiam notum eſt. BC diſtantia Polorum datur. Angulus DBN ex obſervatione patet.

Igitur in Triangulo ABC, datis duobus lateribus AC, CB, & angulo CBA complemento DBN ad gr. 180. invenietur angulus BCA ſeu arcus IA vel HM, quo diviſo per 15 gradus, dabit quotiens numerum Horarum à Meridiano.

XXIII. Datis Altitudine & Declinatione Solis, unà cum angulo Azimuthali, invenire Horam, & Elevationem Poli.

Arcus BA complementum Altitudinis Solis AN datur, datur etiam arcus AC, non ſecùs ac angulus Azimuthalis. Erit igitur

*Vt Sinus arcûs A C,*
*Ad Sinum anguli A B C,*
*Ita Sinus arcûs A B,*
*Ad Sinum anguli A C B ſeu diſtantiæ Solis à Meridiano.*

Pro inveniendâ autem elevatione Poli videas analogiam ad inveniendum latus BC, complementum quæſitæ elevationis CF.

CANON

# CANON
# SINUUM,
## TANGENTIUM,
## SECANTIUM;
## ET
## LOGARITHMORUM

Pro Sinubus & Tangentibus ad Radium 10000000.

# o Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 0 | 0 | 100000.00 | 0 | 0 |
| 1 | 29.09 | 29.09 | 100000.00 | 6.4637261 | 6.4637261 |
| 2 | 58.18 | 58.18 | 100000.02 | 6.7647561 | 6.7647562 |
| 3 | 87.27 | 87.27 | 100000.04 | 6.9408473 | 6.9408475 |
| 4 | 116.36 | 116.36 | 100000.07 | 7.0657860 | 7.0657863 |
| 5 | 145.44 | 145.44 | 100000.11 | 7.1626960 | 7.1626964 |
| 6 | 174.53 | 174.53 | 100000.16 | 7.2418771 | 7.2418778 |
| 7 | 203.62 | 203.62 | 100000.21 | 7.3088239 | 7.3088248 |
| 8 | 232.71 | 232.71 | 100000.27 | 7.3668157 | 7.3668169 |
| 9 | 261.80 | 261.80 | 100000.34 | 7.4179681 | 7.4179696 |
| 10 | 290.89 | 290.89 | 100000.42 | 7.4637255 | 7.4637273 |
| 11 | 319.98 | 319.98 | 100000.51 | 2.5051181 | 7.5051203 |
| 12 | 349.06 | 349.07 | 100000.61 | 7.5429065 | 7.5429091 |
| 13 | 378.15 | 378.16 | 100000.72 | 7.5776684 | 7.5776715 |
| 14 | 407.24 | 407.25 | 100000.83 | 7.6098530 | 7.6098566 |
| 15 | 436.33 | 436.33 | 100000.95 | 7.6398160 | 7.6398201 |
| 16 | 465.42 | 465.42 | 100001.08 | 7.6678445 | 7.6678492 |
| 17 | 494.51 | 494.51 | 100001.22 | 7.6941733 | 7.6941786 |
| 18 | 523.60 | 523.60 | 100001.37 | 7.7189966 | 7.7190026 |
| 19 | 552.68 | 552.69 | 100001.53 | 7.7424775 | 7.7424841 |
| 20 | 581.77 | 581.78 | 100001.70 | 7.7647537 | 7.7647610 |
| 21 | 610.86 | 610.87 | 100001.87 | 7.7859427 | 7.7859508 |
| 22 | 639.95 | 639.96 | 100002.05 | 7.8061458 | 7.8061547 |
| 23 | 669.04 | 669.05 | 100002.24 | 7.8254507 | 7.8254604 |
| 24 | 698.13 | 698.14 | 100002.44 | 7.8439338 | 7.8439444 |
| 25 | 727.21 | 727.23 | 100002.65 | 7.8616623 | 7.8616738 |
| 26 | 756.30 | 756.32 | 100002.86 | 7.8786953 | 7.8787077 |
| 27 | 785.39 | 785.41 | 100003.08 | 7.8950854 | 7.8950988 |
| 28 | 814.48 | 814.50 | 100003.31 | 7.9108793 | 7.9108938 |
| 29 | 843.57 | 843.60 | 100003.55 | 7.9261190 | 7.9261344 |
| 30 | 872.65 | 872.69 | 100003.80 | 7.9408419 | 7.9408584 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 10000000 | Infinit. | Infinit. | 10.0000000 | Infinit. |
| 59 | 99999.99 | 343774667 | 343774682 | 9.9999999. | 13.5362739 |
| 58 | 99999.98 | 171887319 | 171887348 | 9.9999999 | 13.2352438 |
| 57 | 99999.96 | 114591530 | 114591574 | 9.9999998 | 13.0591525 |
| 56 | 99999.93 | 85943630. | 85943689. | 9.9999997 | 12.9342137 |
| 55 | 99999.89 | 68754887. | 68754960. | 9.9999995 | 12.8373036 |
| 54 | 99999.89 | 57295721. | 57295809. | 9.9999993 | 12.7581222 |
| 53 | 99999.79 | 49110600. | 49110702. | 9.9999991 | 12.6911752 |
| 52 | 99999.73 | 42971757. | 42971873. | 9.9999988 | 12.6331831 |
| 51 | 99999.66 | 38197099. | 38197230. | 9.9999985 | 12.5820304 |
| 50 | 99999.58 | 34377371. | 34377516. | 9.9999982 | 12.5362727 |
| 49 | 99999.49 | 31252137. | 31252297. | 9.9999978 | 12.4948797 |
| 48 | 99999.39 | 28647773. | 28647948. | 9.9999974 | 12.4570909 |
| 47 | 99999.28 | 26444080. | 26444269. | 9.9999969 | 12.4223285 |
| 46 | 99999.17 | 24555198. | 24555402. | 9.9999964 | 12.3901434 |
| 45 | 99999.05 | 22918166. | 22918385. | 9 9999959 | 12.3601799 |
| 44 | 99998.92 | 21485762. | 21485995. | 9.9999953 | 12.3321508 |
| 43 | 99998.78 | 20221875. | 20222122. | 9.9999947 | 12.3058214 |
| 42 | 99998.63 | 19098419. | 19098680. | 9.9999940 | 12.2809974 |
| 41 | 99998.47 | 18093220. | 18093496. | 9.9999934 | 12.2575159 |
| 40 | 99998.31 | 17188540. | 17188831. | 9.9999927 | 12.2352390 |
| 39 | 99998.13 | 16370019. | 16370325. | 9.9999919 | 12.2140492 |
| 38 | 99997.95 | 15625908. | 15626228. | 9.9999911 | 12.1938453 |
| 37 | 99997.76 | 14946502. | 14946837. | 9.9999903 | 12.1745396 |
| 36 | 99997.56 | 14323712. | 14324061. | 9.9999894 | 12.1560556 |
| 35 | 99997.36 | 13750745. | 13751108. | 9.9999885 | 12.1383262 |
| 34 | 99997.14 | 13221851. | 13222229. | 9.9999876 | 12.1212923 |
| 33 | 99996.92 | 12732134. | 12732526. | 9.9999866 | 12.1049012 |
| 32 | 99996.68 | 12277396. | 12277803. | 9.9999856 | 12.0891062 |
| 31 | 99996.44 | 11854018. | 11854440. | 9.9999845 | 12.0738656 |
| 30 | 99996.19 | 11458865. | 11459301. | 9.9999835 | 12.0591416 |

# o Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 872.65 | 872.69 | 100003.80 | 7.9408419 | 7.9408584 |
| 31 | 901.74 | 901.78 | 100004.06 | 7.9550819 | 7.9550996 |
| 32 | 930.83 | 930.87 | 100004.33 | 7.9688698 | 7.9688886 |
| 33 | 959.92 | 959.96 | 100004.61 | 7.9822334 | 7.9822534 |
| 34 | 989.00 | 989.05 | 100004.89 | 7.9951980 | 7.9952192 |
| 35 | 1018.09 | 1018.14 | 100005.18 | 8.0077867 | 8.0078092 |
| 36 | 1047.18 | 1047.24 | 100005.48 | 8.0200207 | 8.0200445 |
| 37 | 1076.27 | 1076.33 | 100005.79 | 8.0319195 | 8.0319446 |
| 38 | 1105.35 | 1105.42 | 100006.11 | 8.0435009 | 8.0435274 |
| 39 | 1134.44 | 1134.51 | 100006.44 | 8.0547814 | 8.0548094 |
| 40 | 1163.53 | 1163.61 | 100006.77 | 8.0657763 | 8.0658057 |
| 41 | 1192.61 | 1192.70 | 100007.11 | 8.0764997 | 8.0765306 |
| 42 | 1221.70 | 1221.79 | 100007.46 | 8.0869646 | 8.0869970 |
| 43 | 1250.79 | 1250.88 | 100007.82 | 8.0971832 | 8.0972172 |
| 44 | 1279.87 | 1279.98 | 100008.19 | 8.1071669 | 8.1072025 |
| 45 | 1308.96 | 1309.07 | 100008.57 | 8.1169262 | 8.1169634 |
| 46 | 1338.05 | 1338.17 | 100008.96 | 8.1264710 | 8.1265099 |
| 47 | 1367.13 | 1367.26 | 100009.35 | 8.1358104 | 8.1358510 |
| 48 | 1396.22 | 1396.35 | 100009.75 | 8.1449532 | 8.1449956 |
| 49 | 1425.30 | 1425.45 | 100010.16 | 8.1539075 | 8.1539516 |
| 50 | 1454.39 | 1454.54 | 100010.58 | 8.1626808 | 8.1627267 |
| 51 | 1483.48 | 1483.64 | 100011.01 | 8.1712804 | 8.1713282 |
| 52 | 1512.56 | 1512.73 | 100011.45 | 8.1797129 | 8.1797626 |
| 53 | 1541.65 | 1541.83 | 100011.89 | 8.1879848 | 8.1880364 |
| 54 | 1570.73 | 1570.93 | 100012.34 | 8.1961020 | 8.1961556 |
| 55 | 1599.82 | 1600.02 | 100012.80 | 8.2040703 | 8.2041259 |
| 56 | 1628.90 | 1629.12 | 100013.27 | 8.2118949 | 8.2119526 |
| 57 | 1657.99 | 1658.21 | 100013.75 | 8.2195811 | 8.2196408 |
| 58 | 1687.07 | 1687.31 | 100014.24 | 8.2271335 | 8.2271953 |
| 59 | 1716.16 | 1716.41 | 100014.73 | 8.2345568 | 8.2346208 |
| 60 | 1745.24 | 1745.51 | 100015.23 | 8.2418553 | 8.2419215 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 99996.19 | 11458865. | 11459301. | 9.9999835 | 12.0591416 |
| 29 | 99995.93 | 11089205. | 11089656. | 9.9999823 | 12.0449004 |
| 28 | 99995.66 | 10742648. | 10743114. | 9.9999812 | 12.0311114 |
| 27 | 99995.39 | 10417094. | 10417574. | 9.9999800 | 12.0177466 |
| 26 | 99995.11 | 10110690. | 10111185. | 9.9999788 | 12.0047808 |
| 25 | 99994.82 | 9821794.3 | 9822303.3 | 9.9999775 | 11.9921908 |
| 24 | 99994.52 | 9548947.5 | 9549471.1 | 9.9999762 | 11.9799555 |
| 23 | 99994.21 | 9290848.7 | 9291386.9 | 9.9999748 | 11.9680554 |
| 22 | 99993.89 | 9046333.6 | 9046886.3 | 9.9999735 | 11.9564726 |
| 21 | 99993.56 | 8814357.2 | 8814924.4 | 9.9999721 | 11.9451906 |
| 20 | 99993.23 | 8593979.1 | 8594560.9 | 9.9999706 | 11.9341943 |
| 19 | 99992.89 | 8384350.7 | 8384947.0 | 9.9999691 | 11.9234694 |
| 18 | 99992.54 | 8184704.1 | 8185315.0 | 9.9999676 | 11.9130030 |
| 17 | 99992.18 | 7994343.0 | 7994968.4 | 9.9999660 | 11.9027828 |
| 16 | 99991.81 | 7812634.2 | 7813274.2 | 9.9999644 | 11.8927975 |
| 15 | 99991.43 | 7639000.9 | 7639655.4 | 9.9999628 | 11.8830366 |
| 14 | 99991.04 | 7472916.5 | 7473585.6 | 9.9999611 | 11.8734901 |
| 13 | 99990.65 | 7313899.1 | 7314582.7 | 9.9999594 | 11.8641490 |
| 12 | 99990.25 | 7161507.0 | 7162205.2 | 9.9999577 | 11.8550044 |
| 11 | 99989.84 | 7015334.6 | 7016047.4 | 9.9999559 | 11.8460484 |
| 10 | 99989.42 | 6875008.7 | 6875736.0 | 9.9999541 | 11.8372733 |
| 9 | 99988.99 | 6740185.4 | 6740927.2 | 9.9999522 | 11.8286718 |
| 8 | 99988.55 | 6610547.3 | 6611303.6 | 9.9999503 | 11.8202374 |
| 7 | 99988.11 | 6485800.8 | 6486571.6 | 9.9999484 | 11.8119636 |
| 6 | 99987.66 | 6365674.1 | 6366459.5 | 9.9999464 | 11.8038444 |
| 5 | 99987.20 | 6249915.4 | 6250715.3 | 9.9999444 | 11.7958741 |
| 4 | 99986.73 | 6138290.5 | 6139105.0 | 9.9999424 | 11.7880474 |
| 3 | 99986.25 | 6030582.0 | 6031411.0 | 9.9999403 | 11.7803592 |
| 2 | 99985.76 | 5926587.2 | 5927430.8 | 9.9999382 | 11.7728047 |
| 1 | 99985.27 | 5826117.4 | 5826975.5 | 9.9999360 | 11.7653792 |
| 0 | 99984.77 | 5728996.2 | 5729868.9 | 9.9999338 | 11.7580785 |

## 1 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 1745.24 | 1745.51 | 100015.23 | 8.2418553 | 8.2419215 |
| 1 | 1774.32 | 1774.60 | 100015.74 | 8.2490332 | 8.2491015 |
| 2 | 1803.41 | 1803.70 | 100016.26 | 8.2560943 | 8.2561649 |
| 3 | 1832.49 | 1832.80 | 100016.79 | 8.2630424 | 8.2631153 |
| 4 | 1861.58 | 1861.90 | 100017.33 | 8.2698810 | 8.2699563 |
| 5 | 1890.66 | 1891.00 | 100017.88 | 8.2766136 | 8.2766912 |
| 6 | 1919.74 | 1920.10 | 100018.43 | 8.2832434 | 8.2833234 |
| 7 | 1948.83 | 1949.20 | 100018.99 | 8.2897734 | 8.2898559 |
| 8 | 1977.91 | 1978.30 | 100019.56 | 8.2962067 | 8.2962917 |
| 9 | 2006.99 | 2007.40 | 100020.14 | 8.3025460 | 8.3026335 |
| 10 | 2036.08 | 2036.50 | 100020.73 | 8.3087941 | 8.3088842 |
| 11 | 2065.16 | 2065.60 | 100021.33 | 8.3149536 | 8.3150462 |
| 12 | 2094.24 | 2094.70 | 100021.94 | 8.3210269 | 8.3211221 |
| 13 | 2123.32 | 2123.80 | 100022.55 | 8.3270163 | 8.3271143 |
| 14 | 2152.41 | 2152.91 | 100023.17 | 8.3329243 | 8.3330249 |
| 15 | 2181.49 | 2182.01 | 100023.80 | 8.3387529 | 8.3388563 |
| 16 | 2210.57 | 2211.11 | 100024.44 | 8.3445043 | 8.3446105 |
| 17 | 2239.65 | 2240.21 | 100025.09 | 8.3501805 | 8.3502895 |
| 18 | 2268.73 | 2269.32 | 100025.75 | 8.3557835 | 8.3558953 |
| 19 | 2297.81 | 2298.42 | 100026.41 | 8.3613150 | 8.3614297 |
| 20 | 2326.90 | 2327.53 | 100027.08 | 8.3667769 | 8.3668945 |
| 21 | 2355.98 | 2356.63 | 100027.76 | 8.3721710 | 8.3722915 |
| 22 | 2385.06 | 2385.74 | 100028.45 | 8.3774988 | 8.3776223 |
| 23 | 2414.14 | 2414.84 | 100029.15 | 8.3827620 | 8.3828886 |
| 24 | 2443.22 | 2443.95 | 100029.86 | 8.3879622 | 8.3880918 |
| 25 | 2472.30 | 2473.05 | 100030.58 | 8.3931008 | 8.3932336 |
| 26 | 2501.38 | 2502.16 | 100031.30 | 8.3981793 | 8.3983152 |
| 27 | 3530.46 | 2531.27 | 100032.03 | 8.4031990 | 8.4033381 |
| 28 | 2559.54 | 2560.38 | 100032.77 | 8.4081614 | 8.4083037 |
| 29 | 2588.62 | 2589.48 | 100033.52 | 8.4130676 | 8.4132132 |
| 30 | 2617.69 | 2618.59 | 100034.28 | 8.4179190 | 4.4180679 |

# 88 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 99984.77 | 5728996.2 | 5729868.8 | 9.9999338 | 11.7580785 |
| 59 | 99984.26 | 5635059.0 | 5635946.2 | 9.9999316 | 11.7508985 |
| 58 | 99983.74 | 5544151.7 | 5545053.4 | 9.9999294 | 11.7438351 |
| 57 | 99983.21 | 5456130.0 | 5457046.3 | 9.9999271 | 11.7368847 |
| 56 | 99982.67 | 5370858.7 | 5371789.6 | 9.9999247 | 11.7300437 |
| 55 | 99982.12 | 5288210.9 | 5289156.4 | 9.9999224 | 11.7233088 |
| 54 | 99981.57 | 5208067.3 | 5209027.2 | 9.9999200 | 11.7166766 |
| 53 | 99981.01 | 5130315.7 | 5131290.2 | 9.9999175 | 11.7101441 |
| 52 | 99980.44 | 5054850.6 | 5055839.6 | 9.9999150 | 11.7037083 |
| 51 | 99979.86 | 4981572.6 | 4982576.2 | 9.9999125 | 11.6973665 |
| 50 | 99979.27 | 4910388.1 | 4911406.2 | 9.9999100 | 11.6911158 |
| 49 | 99978.67 | 4841208.4 | 4842241.1 | 9.9999074 | 11.6849538 |
| 48 | 99978.06 | 4773950.1 | 4774997.4 | 9.9999047 | 11.6788779 |
| 47 | 99977.45 | 4708534.3 | 4709596.1 | 9.9999021 | 11.6728857 |
| 46 | 99976.83 | 4644886.2 | 4645962.5 | 9.9998994 | 11.6669751 |
| 45 | 99976.20 | 4582935.1 | 4584026.0 | 9.9998966 | 11.6611437 |
| 44 | 99975.56 | 4522614.1 | 4523719.5 | 9.9998939 | 11.6553895 |
| 43 | 99974.91 | 4463859.6 | 4464979.5 | 9.9998911 | 11.6497105 |
| 42 | 99974.25 | 4406611.3 | 4407745.8 | 9.9998882 | 11.6441047 |
| 41 | 99973.59 | 4350812.2 | 4351961.2 | 9.9998853 | 11.6385703 |
| 40 | 99972.92 | 4296407.7 | 4297571.3 | 9.9998824 | 11.6331055 |
| 39 | 99972.24 | 4243346.4 | 4244524.5 | 9.9998794 | 11.6277085 |
| 38 | 99971.55 | 4191579.0 | 4192771.7 | 9.9998764 | 11.6223777 |
| 37 | 99970.85 | 4141058.8 | 4142266.0 | 9.9998734 | 11.6171114 |
| 36 | 99970.14 | 4091741.2 | 4092962.9 | 9.9998703 | 11.6119082 |
| 35 | 99969.43 | 4043583.7 | 4044820.1 | 9.9998672 | 11.6067664 |
| 34 | 99968.71 | 3996546.0 | 3997796.9 | 9.9998641 | 11.6016848 |
| 33 | 99967.98 | 3950589.5 | 3951854.9 | 9.9998609 | 11.5966619 |
| 32 | 99967.24 | 3905677.1 | 3906957.1 | 9.9998577 | 11.5916963 |
| 31 | 99966.49 | 3861773.8 | 3863068.3 | 9.9998544 | 11.5867868 |
| 30 | 99965.73 | 3818845.9 | 3820155.0 | 9.9998512 | 11.5819321 |

# 1 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 2617.69 | 2618.59 | 100034.28 | 8.4179190 | 8.4180679 |
| 31 | 2646.77 | 2647.70 | 100035.05 | 8.4227168 | 8.4228690 |
| 32 | 2675.85 | 2676.81 | 100035.82 | 8.4274621 | 8.4276176 |
| 33 | 2704.93 | 2705.92 | 100036.60 | 8.4321561 | 8.4323150 |
| 34 | 2734.01 | 2735.03 | 100037.39 | 8.4367999 | 8.4369622 |
| 35 | 2763.09 | 2764.14 | 100038.19 | 8.4413944 | 8.4415603 |
| 36 | 2792.16 | 2793.25 | 100039.00 | 8.4459409 | 8.4461103 |
| 37 | 2821.24 | 2822.36 | 100039.82 | 8.4504402 | 8.4506131 |
| 38 | 2850.32 | 2851.48 | 100040.65 | 8.4548934 | 8.4550699 |
| 39 | 2879.40 | 2880.59 | 100041.48 | 8.4593013 | 8.4594814 |
| 40 | 2908.47 | 2909.70 | 100042.32 | 8.4636649 | 8.4638486 |
| 41 | 2937.55 | 2938.82 | 100043.17 | 8.4679850 | 8.4681725 |
| 42 | 2966.62 | 2967.93 | 100044.03 | 8.4722626 | 8.4724538 |
| 43 | 2995.70 | 2997.05 | 100044.90 | 8.4764984 | 8.4766933 |
| 44 | 3024.78 | 3026.16 | 100045.78 | 8.4806932 | 8.4808920 |
| 45 | 3053.85 | 3055.28 | 100046.67 | 8.4848479 | 8.4850505 |
| 46 | 3082.93 | 3084.39 | 100047.56 | 8.4889632 | 8.4891696 |
| 47 | 3112.00 | 3113.51 | 100048.46 | 8.4930398 | 8.4932502 |
| 48 | 3141.08 | 3142.63 | 100049.37 | 8.4970784 | 8.4972928 |
| 49 | 3170.15 | 3171.74 | 100050.29 | 8.5010798 | 8.5012982 |
| 50 | 3199.22 | 3200.86 | 100051.22 | 8.5050447 | 8.5052671 |
| 51 | 3228.30 | 3229.98 | 100052.15 | 8.5089736 | 8.5092001 |
| 52 | 3257.37 | 3259.10 | 100053.09 | 8.5128673 | 8.5130978 |
| 53 | 3286.44 | 3288.22 | 100054.05 | 8.5167264 | 8.5169610 |
| 54 | 3315.52 | 3317.34 | 100055.01 | 8.5205514 | 8.5207902 |
| 55 | 3344.59 | 3346.46 | 100055.98 | 8.5243430 | 8.5245860 |
| 56 | 3373.66 | 3375.58 | 100056.96 | 8.5281017 | 8.5283490 |
| 57 | 3402.73 | 3404.71 | 100057.95 | 8.5318281 | 8.5320797 |
| 58 | 3431.81 | 3433.83 | 100058.94 | 8.5355228 | 8.5357787 |
| 59 | 3460.88 | 3462.95 | 100059.94 | 8.5391863 | 8.5394466 |
| 60 | 3489.95 | 3492.08 | 100060.95 | 8.5428192 | 8.5430838 |

## 88 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 99965.73 | 3818845.9 | 3820155.0 | 9.9998512 | 11.5819321 |
| 29 | 99964.96 | 3776861.3 | 3778184.9 | 9.9998478 | 11.5771310 |
| 28 | 99964.19 | 3735789.2 | 3737127.3 | 9.9998445 | 11.5723824 |
| 27 | 99963.41 | 3695600.1 | 3696952.8 | 9.9998411 | 11.5676850 |
| 26 | 99962.62 | 36562[illegible]5.9 | 3657633.2 | 9.9998376 | 11.5630378 |
| 25 | 99961.82 | 3617759.6 | 3619141.4 | 9.9998342 | 11.5584397 |
| 24 | 99961.01 | 3580055.3 | 3581451.7 | 9.9998306 | 11.5538897 |
| 23 | 99960.19 | 3543128.2 | 3544539.1 | 9.9998271 | 11.5493869 |
| 22 | 99959.36 | 3506954.6 | 3508380.0 | 9.9998235 | 11.5449301 |
| 21 | 99958.53 | 3471511.5 | 3472951.5 | 9.9998199 | 11.5405186 |
| 20 | 99957.69 | 3436777.1 | 3438231.6 | 9.9998162 | 11.5361514 |
| 19 | 99956.84 | 3402730.3 | 3404199.4 | 9.9998125 | 11.5318275 |
| 18 | 99955.98 | 3369350.9 | 3370834.5 | 9.9998088 | 11.5275462 |
| 17 | 99955.11 | 3336619.4 | 3338117.6 | 9.9998050 | 11.5233067 |
| 16 | 99954.24 | 3304517.3 | 3306030.0 | 9.9998012 | 11.5191080 |
| 15 | 99953.36 | 3273026.4 | 3274553.6 | 9.9997974 | 11.5149495 |
| 14 | 99952.47 | 3242129.5 | 3243671.3 | 9.9997935 | 11.5108304 |
| 13 | 99951.57 | 3211809.9 | 3213366.3 | 9.9997896 | 11.5067498 |
| 12 | 99950.66 | 3182051.6 | 3183622.5 | 9.9997856 | 11.50270[illegible]2 |
| 11 | 99949.74 | 3152839.2 | 3154424.6 | 9.9997817 | 11.4987018 |
| 10 | 99948.81 | 3124157.7 | 3125757.7 | 9.9997776 | 11.4947329 |
| 9 | 99947.88 | 3095992.8 | 3097607.4 | 9.9997736 | 11.4907999 |
| 8 | 99946.94 | 3068330.7 | 3069959.8 | 9.9997695 | 11.4869022 |
| 7 | 99945.99 | 3041158.0 | 3042801.7 | 9.9997653 | 11.4830387 |
| 6 | 99945.03 | 3014461.9 | 3016120.1 | 9.9997612 | 11.4792098 |
| 5 | 99944.06 | 2988229.9 | 2989902.6 | 9.9997570 | 11.4754140 |
| 4 | 99943.08 | 2962449.9 | 2964137.3 | 9.9997527 | 11.4716510 |
| 3 | 99942.09 | 2937110.6 | 2938812.4 | 9.9997484 | 11.4679203 |
| 2 | 99941.09 | 2912200.5 | 2913916.9 | 9.9997441 | 11.4642213 |
| 1 | 99940.09 | 2887708.9 | 2889439.8 | 9.9997398 | 11.4605534 |
| 0 | 99939.08 | 2863625.3 | 2865370.8 | 9.9997354 | 11.4569162 |

# 2 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 3489.95 | 3492.08 | 100060.95 | 8.5428192 | 8.5430838 |
| 1 | 3519.02 | 3521.20 | 100061.97 | 8.5464218 | 8.5466909 |
| 2 | 3548.09 | 3550.33 | 100063.00 | 8.5499948 | 8.5502683 |
| 3 | 3577.16 | 3579.45 | 100064.04 | 8.5535386 | 8.5538166 |
| 4 | 3606.23 | 3608.58 | 100065.09 | 8.5570536 | 8.5573362 |
| 5 | 3635.30 | 3637.71 | 100066.15 | 8.5605404 | 8.5608276 |
| 6 | 3664.37 | 3666.83 | 100067.21 | 8.5639994 | 8.5642912 |
| 7 | 3693.44 | 3695.96 | 100068.28 | 8.5674310 | 8.5677275 |
| 8 | 3722.51 | 3725.09 | 100069.36 | 8.5708357 | 8.5711368 |
| 9 | 3751.58 | 3754.22 | 100070.45 | 8.5742139 | 8.5745197 |
| 10 | 3780.65 | 3783.35 | 100071.55 | 8.5775660 | 8.5778766 |
| 11 | 3809.71 | 3812.48 | 100072.66 | 8.5808923 | 8.5812077 |
| 12 | 3838.78 | 3841.61 | 100073.77 | 8.5841933 | 8.5845136 |
| 13 | 3867.85 | 3870.74 | 100074.89 | 8.5874694 | 8.5877945 |
| 14 | 3896.91 | 3899.88 | 100076.02 | 8.5907209 | 8.5910509 |
| 15 | 3925.98 | 3929.01 | 100077.16 | 8.5939483 | 8.5942832 |
| 16 | 3955.05 | 3958.14 | 100078.31 | 8.5971517 | 8.5974917 |
| 17 | 3984.11 | 3987.28 | 100079.47 | 8.6003317 | 8.6006767 |
| 18 | 4013.18 | 4016.41 | 100080.63 | 8.6034886 | 8.6038386 |
| 19 | 4042.24 | 4045.55 | 100081.80 | 8.6066226 | 8.6069777 |
| 20 | 4071.31 | 4074.69 | 100082.98 | 8.6097341 | 8.6100943 |
| 21 | 4100.37 | 4103.83 | 100084.17 | 8.6128235 | 8.6131889 |
| 22 | 4129.44 | 4132.96 | 100085.37 | 8.6158910 | 8.6162616 |
| 23 | 4158.50 | 4162.10 | 100086.58 | 8.6189369 | 8.6193127 |
| 24 | 4187.57 | 4191.24 | 100087.80 | 8.6219616 | 8.6223427 |
| 25 | 4216.63 | 4220.38 | 100089.02 | 8.6249653 | 8.6253518 |
| 26 | 4245.69 | 4249.52 | 100090.25 | 8.6279484 | 8.6283402 |
| 27 | 4274.75 | 4278.66 | 100091.49 | 8.6309111 | 8.6313083 |
| 28 | 4303.82 | 4307.81 | 100092.74 | 8.6338537 | 8.6342563 |
| 29 | 4332.88 | 4336.95 | 100094.00 | 8.6367764 | 8.6371845 |
| 30 | 4361.94 | 4366.09 | 100095.27 | 8.6396796 | 8.6400931 |

# 87 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 99939.08 | 2863625.3 | 2865370.8 | 9.9997354 | 11.4569162 |
| 59 | 99938.06 | 2839939.7 | 2841699.7 | 9.9997309 | 11.4533091 |
| 58 | 99937.03 | 2816642.2 | 2818416.8 | 9.9997265 | 11.4497317 |
| 57 | 99935.99 | 2793723.3 | 2795512.5 | 9.9997220 | 11.4461834 |
| 56 | 99934.95 | 2771174.0 | 2772977.7 | 9.9997174 | 11.4426638 |
| 55 | 99933.90 | 2748985.3 | 2750803.5 | 9.9997128 | 11.4391724 |
| 54 | 99932.84 | 2727148.6 | 2728981.4 | 9.9997082 | 10.4357088 |
| 53 | 99931.77 | 2705655.7 | 2707503.0 | 9.9997036 | 11.4322725 |
| 52 | 99930.69 | 2684498.4 | 2686360.3 | 9.9996989 | 11.4288632 |
| 51 | 99929.60 | 2663669.0 | 2665545.5 | 9.9996942 | 11.4254803 |
| 50 | 99928.51 | 2643160.0 | 2645051.0 | 9.9996894 | 11.4221234 |
| 49 | 99927.40 | 2622963.8 | 2624869.4 | 9.9996846 | 11.4187923 |
| 48 | 99926.29 | 2603073.6 | 2604993.7 | 9.9996798 | 11.4154864 |
| 47 | 99925.17 | 2583482.3 | 2585416.9 | 9.9996749 | 11.4122055 |
| 46 | 99924.04 | 2564183.2 | 2566132.4 | 9.9996700 | 11.4089491 |
| 45 | 99922.90 | 2545170.0 | 2547133.7 | 9.9996650 | 11.4057168 |
| 44 | 99921.75 | 2526436.1 | 2528414.4 | 9.9996601 | 11.4025083 |
| 43 | 99920.60 | 2507975.7 | 2509968.5 | 9.9996550 | 11.3993233 |
| 42 | 99919.44 | 2489782.6 | 2491790.0 | 9.9996500 | 11.3961614 |
| 41 | 99918.27 | 2471851.2 | 2473873.1 | 9.9996449 | 11.3930223 |
| 40 | 99917.09 | 2454175.8 | 2456212.3 | 9.9996398 | 11.3899057 |
| 39 | 99915.90 | 2436750.9 | 2438802.0 | 9.9996346 | 11.3868111 |
| 38 | 99914.70 | 2419571.4 | 2421637.0 | 9.9996294 | 11.3837384 |
| 37 | 99913.49 | 2402632.0 | 2404712.1 | 9.9996242 | 11.3806873 |
| 36 | 99912.28 | 2385927.7 | 2388022.4 | 9.9996189 | 11.3776573 |
| 35 | 99911.06 | 2369453.7 | 2371563.0 | 9.9996136 | 11.3746482 |
| 34 | 99909.83 | 2353205.2 | 2355329.0 | 9.9996082 | 11.3716598 |
| 33 | 99908.59 | 2337177.7 | 2339316.1 | 9.9996028 | 11.3686917 |
| 32 | 99907.34 | 2321366.6 | 2323519.6 | 9.9995974 | 11.3657437 |
| 31 | 99906.08 | 2305767.7 | 2307935.1 | 9.9995919 | 11.3628155 |
| 30 | 99904.82 | 2290376.5 | 2292558.6 | 9.9995865 | 11.3599059 |

# 2 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 4361.94 | 4366.09 | 100095.27 | 8.6396796 | 8.6400931 |
| 31 | 4391.00 | 4395.24 | 100096.55 | 8.6425634 | 8.6429825 |
| 32 | 4420.06 | 4424.38 | 100097.83 | 8.6454282 | 8.6458528 |
| 33 | 4449.12 | 4453.53 | 100099.12 | 8.6482742 | 8.6487044 |
| 34 | 4478.18 | 4482.68 | 100100.42 | 8.6511016 | 8.6515375 |
| 35 | 4507.24 | 4511.82 | 100101.73 | 8.6539107 | 8.6543522 |
| 36 | 4536.30 | 4540.97 | 100103.05 | 8.6567017 | 8.6571490 |
| 37 | 4565.36 | 45 0. 2 | 100104.38 | 8.6594748 | 8.6599279 |
| 38 | 4594.42 | 4599.27 | 100105.71 | 8.6622303 | 8.6626891 |
| 39 | 4623.47 | 4628.42 | 100107.05 | 8.6649684 | 8.6654331 |
| 40 | 4652.53 | 4657.57 | 100108.40 | 8.6676893 | 8.6681598 |
| 41 | 4681.59 | 4686.73 | 100109.76 | 8.6703932 | 8.6708697 |
| 42 | 4710.64 | 4715.88 | 100111.13 | 8.6730804 | 8.6735628 |
| 43 | 4739.70 | 4745.03 | 100112.51 | 8.6757510 | 8.6762393 |
| 44 | 4768.76 | 4774.19 | 100113.90 | 8.6784052 | 8.6788996 |
| 45 | 4797.81 | 4803.34 | 100115.30 | 8.6810433 | 8.6815437 |
| 46 | 4826.87 | 4832.50 | 100116.70 | 8.6836654 | 8.6841719 |
| 47 | 4855.92 | 4861.66 | 100118.11 | 8.6862718 | 8.6867844 |
| 48 | 4884.98 | 4890.82 | 100119.53 | 8.6888625 | 8.6893813 |
| 49 | 4914.03 | 4919.97 | 100120.96 | 8.6914379 | 8.6919629 |
| 50 | 4943.08 | 4949.13 | 100122.40 | 8.6939980 | 8.6945292 |
| 51 | 4972.14 | 4978.29 | 100123.85 | 8.6965431 | 8.6970806 |
| 52 | 5001.19 | 5007.45 | 100125.30 | 8.6990734 | 8.6996173 |
| 53 | 5030.24 | 5036.62 | 100126.76 | 8.7015889 | 8.7021390 |
| 54 | 5059.29 | 5065.78 | 100128.23 | 8.7040899 | 8.7046455 |
| 55 | 5088.35 | 5094.95 | 100129.71 | 8.7065766 | 8.7071395 |
| 56 | 5117.40 | 5124.11 | 100131.20 | 8.7090490 | 8.7096185 |
| 57 | 5146.45 | 5153.28 | 100132.70 | 8.7115075 | 8.7120834 |
| 58 | 5175.50 | 5182.44 | 100134.20 | 8.7139520 | 8.7145345 |
| 59 | 5204.55 | 5211.61 | 100135.71 | 8.7163829 | 8.7169719 |
| 60 | 5233.60 | 5240.78 | 100137.23 | 8.7188002 | 8.7193958 |

# 87 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 99904.82 | 2290376.5 | 2292558.6 | 9.9995865 | 11.3599069 |
| 29 | 99903.55 | 2275189.2 | 2277385.7 | 9.9995809 | 11.3570175 |
| 28 | 99902.27 | 2260201.5 | 2262412.6 | 9.9995753 | 11.3541472 |
| 27 | 99900.98 | 2245409.6 | 2247635.2 | 9.9995697 | 11.3512956 |
| 26 | 99899.68 | 2230809.7 | 2233049.9 | 9.9995641 | 11.3484625 |
| 25 | 99898.37 | 2216398.0 | 2218652.8 | 9.9995584 | 11.3456478 |
| 24 | 99897.05 | 2202171.0 | 2204440.3 | 9.9995527 | 11.3428510 |
| 23 | 99895.73 | 2188125.1 | 2190409.0 | 9.9995469 | 11.3400721 |
| 22 | 99894.40 | 2174256.9 | 2176555.3 | 9.9995411 | 11.3373109 |
| 21 | 99893.06 | 2160563.0 | 2162875.9 | 9.9995353 | 11.3345[illegible]69 |
| 20 | 99891.71 | 2147040.1 | 2149367.6 | 9.9995295 | 11.3318402 |
| 19 | 99890.35 | 2133685.1 | 2136027.2 | 9.9995236 | 11.3291303 |
| 18 | 99888.98 | 2120494.9 | 2122851.5 | 9.9995176 | 11.3264372 |
| 17 | 99887.61 | 2107466.4 | 2199837.5 | 9.9995116 | 11.3237607 |
| 16 | 99886.23 | 2094596.6 | 2096982.4 | 9.9995056 | 11.3211004 |
| 15 | 99884.84 | 2081882.8 | 2084283.0 | 9.9994996 | 11.3184563 |
| 14 | 99883.44 | 2069322.0 | 2071736.8 | 9.9994935 | 11.3158281 |
| 13 | 99882.03 | 2056911.5 | 2059340.9 | 9.9994874 | 11.3132156 |
| 12 | 99880.61 | 2044648.6 | 2047092.5 | 9.9994812 | 11.3106187 |
| 11 | 99879.18 | 2032530.7 | 2034989.2 | 9.9994750 | 11.3080371 |
| 10 | 99877.75 | 2020555.3 | 2023028.4 | 9.9994688 | 11.3054708 |
| 9 | 99876.31 | 2008719.9 | 2011207.5 | 9.9994625 | 11.3029194 |
| 8 | 99874.86 | 1997021.9 | 1999524.1 | 9.9994562 | 11.3003828 |
| 7 | 99873.40 | 1985459.1 | 1987975.8 | 9.9994498 | 11.2978610 |
| 6 | 99871.93 | 1974029.1 | 1976560.4 | 9.9994435 | 11.2953535 |
| 5 | 99870.45 | 1962729.6 | 1965275.4 | 9.9994370 | 11.2928605 |
| 4 | 99868.97 | 1951558.4 | 1954118.7 | 9.9994306 | 11.2903815 |
| 3 | 99867.48 | 1940513.3 | 1943088.2 | 9.9994241 | 11.2879166 |
| 2 | 99865.98 | 1929592.2 | 1932181.6 | 9.9994176 | 11.2854655 |
| 1 | 99864.47 | 1918793.0 | 1921397.0 | 9.9994110 | 11.2830281 |
| 0 | 99862.95 | 1908113.7 | 1910732.3 | 9.9994044 | 11.2806042 |

# 3 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 5233.60 | 5240.78 | 100137.23 | 8.7188002 | 8.7193958 |
| 1 | 5262.64 | 5269.95 | 100138.76 | 8.7212040 | 8.7218063 |
| 2 | 5291.69 | 5299.12 | 100140.30 | 8.7235946 | 8.7242035 |
| 3 | 5320.74 | 5328.29 | 100141.85 | 8.7259721 | 8.7265877 |
| 4 | 5349.79 | 5357.46 | 100143.41 | 8.7283366 | 8.7289589 |
| 5 | 5378.83 | 5386.63 | 100144.98 | 8.7306882 | 8.7313174 |
| 6 | 5407.88 | 5415.81 | 100146.55 | 8.7330272 | 8.7336631 |
| 7 | 5436.93 | 5444.98 | 100148.13 | 8.7353535 | 8.7359964 |
| 8 | 5465.97 | 5474.16 | 100149.72 | 8.7376675 | 8.7383172 |
| 9 | 5495.02 | 5503.33 | 100151.32 | 8.7399691 | 8.7406258 |
| 10 | 5524.06 | 5532.51 | 100152.93 | 8.7422586 | 8.7429222 |
| 11 | 5553.11 | 5561.69 | 100154.55 | 8.7445360 | 8.7452067 |
| 12 | 5582.15 | 5590.87 | 100156.17 | 8.7468015 | 8.7474792 |
| 13 | 5611.19 | 5620.05 | 100157.80 | 8.7490553 | 8.7497400 |
| 14 | 5640.24 | 5649.23 | 100159.44 | 8.7512973 | 8.7519892 |
| 15 | 5669.28 | 5678.41 | 100161.09 | 8.7535278 | 8.7542269 |
| 16 | 5698.32 | 5707.59 | 100162.75 | 8.7557469 | 8.7564531 |
| 17 | 5727.36 | 5736.78 | 100164.42 | 8.7579546 | 8.7586681 |
| 18 | 5756.40 | 5765.96 | 100166.10 | 8.7601512 | 8.7608719 |
| 19 | 5785.44 | 5795.15 | 100167.78 | 8.7623366 | 8.7630647 |
| 20 | 5814.48 | 5824.34 | 100169.47 | 8.7645111 | 8.7652465 |
| 21 | 5843.52 | 5853.52 | 100171.17 | 8.7666747 | 8.7674175 |
| 22 | 5872.56 | 5882.71 | 100172.88 | 8.7688275 | 8.7695777 |
| 23 | 5901.60 | 5911.90 | 100174.60 | 8.7709697 | 8.7717274 |
| 24 | 5930.64 | 5941.09 | 100176.33 | 8.7731014 | 8.7738665 |
| 25 | 5959.67 | 5970.29 | 100178.07 | 8.7752226 | 8.7759952 |
| 26 | 5988.71 | 5999.48 | 100179.81 | 8.7773334 | 8.7781136 |
| 27 | 6017.75 | 6028.67 | 100181.56 | 8.7794340 | 8.7802218 |
| 28 | 6046.78 | 6057.87 | 100183.32 | 8.7815244 | 8.7823199 |
| 29 | 6075.82 | 6087.06 | 100185.09 | 8.7836048 | 8.7844079 |
| 30 | 6104.85 | 6116.26 | 100186.87 | 8.7856753 | 8.7864861 |

# 86 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 99862.95 | 1908113.7 | 1910732.3 | 9.9994044 | 11.2806042 |
| 59 | 99861.42 | 1897552.3 | 1900185.4 | 9.9993978 | 11.2781937 |
| 58 | 99859.89 | 1887106.8 | 1889754.5 | 9.9993911 | 11.2757965 |
| 57 | 99858.35 | 1876775.4 | 1879437.6 | 9.9993844 | 11.2734123 |
| 56 | 99856.80 | 1866556.2 | 1869233.0 | 9.9993776 | 11.2710411 |
| 55 | 99855.24 | 1856447.3 | 1859138.7 | 9.9993708 | 11.2686826 |
| 54 | 99853.67 | 1846447.1 | 1849153.0 | 9.9993640 | 11.2663369 |
| 53 | 99852.09 | 1836553.7 | 1839274.2 | 9.9993572 | 11.2640036 |
| 52 | 99850.50 | 1826765.4 | 1829500.5 | 9.9993503 | 11.2616828 |
| 51 | 99848.91 | 1817080.7 | 1819830.3 | 9.9993433 | 11.2593742 |
| 50 | 99847.31 | 1807497.7 | 1810261.9 | 9.9993364 | 11.2570778 |
| 49 | 99845.70 | 1798015.0 | 1800793.7 | 9.9993293 | 11.2547933 |
| 48 | 99844.08 | 1788631.0 | 1791424.3 | 9.9993223 | 11.2525208 |
| 47 | 99842.45 | 1779344.2 | 1782152.0 | 9.9993152 | 11.2502600 |
| 46 | 99840.81 | 1770152.9 | 1772975.3 | 9.9993081 | 11.2480108 |
| 45 | 99839.16 | 1761055.9 | 1763892.8 | 9.9993009 | 11.2457731 |
| 44 | 99837.51 | 1752051.6 | 1754903.0 | 9.9992938 | 11.2435469 |
| 43 | 99835.85 | 1743138.5 | 1746004.6 | 9.9992865 | 11.2413319 |
| 42 | 99834.18 | 1734315.5 | 1737196.0 | 9.9992793 | 11.2391281 |
| 41 | 99832.50 | 1725580.9 | 1728476.1 | 9.9992720 | 11.2369353 |
| 40 | 99830.81 | 1716933.7 | 1719843.4 | 9.9992646 | 11.2347535 |
| 39 | 99829.11 | 1708372.4 | 1711296.6 | 9.9992572 | 11.2325825 |
| 38 | 99827.41 | 1699895.7 | 1702834.6 | 9.9992498 | 11.2304223 |
| 37 | 99825.70 | 1691502.5 | 1694455.9 | 9.9992424 | 11.2282726 |
| 36 | 99823.98 | 1683191.5 | 1686159.4 | 9.9992349 | 11.2261335 |
| 35 | 99822.25 | 1674961.4 | 1677943.9 | 9.9992274 | 11.2240048 |
| 34 | 99820.51 | 1666811.2 | 1669808.2 | 9.9992198 | 11.2218864 |
| 33 | 99818.76 | 1658739.6 | 1661751.2 | 9.9992122 | 11.2197782 |
| 32 | 99817.01 | 1650745.5 | 1653771.7 | 9.9992046 | 11.2176801 |
| 31 | 99815.25 | 1642827.9 | 1645868.6 | 9.9991969 | 11.2155921 |
| 30 | 99813.48 | 1634985.6 | 1638040.8 | 9.9991892 | 11.2135139 |

## 3 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 6104.85 | 6116.26 | 100186.87 | 8.7856753 | 8.7864861 |
| 31 | 6133.89 | 6145.46 | 100188.66 | 8.787 359 | 8.7885544 |
| 32 | 6162.92 | 6174.66 | 100190.46 | 8.7897867 | 8.7906130 |
| 33 | 6191.96 | 6203.86 | 100192.26 | 8.7918278 | 8.7926620 |
| 34 | 6220.99 | 6233.06 | 100194.07 | 8.7938594 | 8.7947014 |
| 35 | 6250.02 | 6262.26 | 100195.89 | 8.7958814 | 8.7967313 |
| 36 | 6279.05 | 6291.47 | 100197.72 | 8.7978941 | 8.7987519 |
| 37 | 6308.08 | 6320.67 | 100199.56 | 8.7998974 | 8.8007632 |
| 38 | 6337.11 | 6349.88 | 100201.41 | 8.8018915 | 8.8027653 |
| 39 | 6366.14 | 6379.08 | 100203.26 | 8.8038764 | 8.8047583 |
| 40 | 6395.17 | 6408.29 | 100205.12 | 8.8058523 | 8.8067422 |
| 41 | 6424.20 | 6437.50 | 100206.99 | 8.8078192 | 8.8087172 |
| 42 | 6453.23 | 6466.71 | 100208.87 | 8.8097772 | 8.8106834 |
| 43 | 6482.26 | 6495.92 | 100210.76 | 8.8117264 | 8.8126407 |
| 44 | 6511.29 | 6525.13 | 100212.66 | 8.8136668 | 8.8145894 |
| 45 | 6540.31 | 6554.35 | 100214.57 | 8.8155985 | 8.8165294 |
| 46 | 6569.34 | 6583.56 | 100216.49 | 8.8175217 | 8.8184608 |
| 47 | 6598.36 | 6612.78 | 100218.41 | 8.8194363 | 8.8203838 |
| 48 | 6627.39 | 6641.99 | 100220.34 | 8.8213425 | 8.8222984 |
| 49 | 6656.41 | 6671.21 | 100222.28 | 8.8232404 | 8.8242046 |
| 50 | 6685.44 | 6700.43 | 100224.23 | 8.8251299 | 8.8261026 |
| 51 | 6714.46 | 6729.65 | 100226.19 | 8.8270112 | 8.8279924 |
| 52 | 6743.48 | 6758.87 | 100228.16 | 8.8288844 | 8.8298741 |
| 53 | 6772.51 | 6788.09 | 100230.13 | 8.8307495 | 8.8317478 |
| 54 | 6801.53 | 6817.32 | 100232.11 | 8.8326066 | 8.8336134 |
| 55 | 6830.55 | 6846.54 | 100234.10 | 8.8344557 | 8.8354712 |
| 56 | 6859.57 | 6875.77 | 100236.10 | 8.8362969 | 8.8373211 |
| 57 | 6888.59 | 6904.99 | 100238.11 | 8.8381304 | 8.8391633 |
| 58 | 6917.61 | 6934.22 | 100240.13 | 8.8399561 | 8.8409977 |
| 59 | 6946.63 | 6963.45 | 100242.16 | 8.8417741 | 8.8428245 |
| 60 | 6975.65 | 6992.68 | 100244.19 | 8.8435845 | 8.8446437 |

# 86 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tang |
|---|---|---|---|---|---|
| 30 | 99813.48 | 1634985.5 | 1638040.8 | 9.9991892 | 11.2135139 |
| 29 | 99811.70 | 1627217.4 | 1630287.3 | 9.9991815 | 11.2114456 |
| 28 | 99809.91 | 1619522.5 | 1622606.9 | 9.9991737 | 11.2093870 |
| 27 | 99808.11 | 1611899.8 | 1614998.7 | 9.9991659 | 11.2073380 |
| 26 | 99806.30 | 1604348.2 | 1607461.7 | 9.9991580 | 11.2052986 |
| 25 | 99804.49 | 1596866.7 | 1599994.8 | 9.9991501 | 11.2032687 |
| 24 | 99802.67 | 1589454.5 | 1592597.1 | 9.9991422 | 11.2012481 |
| 23 | 99800.84 | 1582110.4 | 1585267.6 | 9.9991342 | 11.1992368 |
| 22 | 99799.00 | 1574833.7 | 1578005.4 | 9.9991262 | 11.1972347 |
| 21 | 99797.15 | 1567623.3 | 1570809.6 | 9.9991182 | 11.1952417 |
| 20 | 99795.29 | 1560478.4 | 1563679.3 | 9.9991101 | 11.1932578 |
| 19 | 99793.43 | 1553398.1 | 1556613.5 | 9.9991020 | 11.1912828 |
| 18 | 99791.56 | 1546381.4 | 1549611.4 | 9.9990938 | 11.1893166 |
| 17 | 99789.68 | 1539427.6 | 1542672.1 | 9.9990856 | 11.1873593 |
| 16 | 99787.79 | 1532535.8 | 1535794.9 | 9.9990774 | 11.1854106 |
| 15 | 99785.89 | 1525705.2 | 1528978.8 | 9.9990601 | 11.1834706 |
| 14 | 99783.98 | 1518934.9 | 1522223.1 | 9.9990608 | 11.1815392 |
| 13 | 99782.06 | 1512224.2 | 1515527.0 | 9.9990525 | 11.1796162 |
| 12 | 99780.14 | 1505572.3 | 1508889.6 | 9.9990441 | 11.1777016 |
| 11 | 99778.21 | 1498978.4 | 1502310.3 | 9.9990357 | 11.1757954 |
| 10 | 99776.27 | 1492441.7 | 1495788.2 | 9.9990273 | 11.1738974 |
| 9 | 99774.32 | 1485961.5 | 1489322.6 | 9.9990188 | 11.1720076 |
| 8 | 99772.36 | 1479537.2 | 1482912.8 | 9.9990103 | 11.1701259 |
| 7 | 99770.39 | 1473167.9 | 1476558.0 | 9.9990017 | 11.1682522 |
| 6 | 99768.42 | 1466852.9 | 1470257.6 | 9.9989931 | 11.1663866 |
| 5 | 99766.44 | 1460591.6 | 1464010.9 | 9.9989845 | 11.1645288 |
| 4 | 99764.45 | 1454383.3 | 1457817.1 | 9.9989758 | 11.1626789 |
| 3 | 99762.45 | 1448227.3 | 1451676.7 | 9.9989671 | 11.1608367 |
| 2 | 99760.44 | 1442123.0 | 1445585.9 | 9.9989584 | 11.1590023 |
| 1 | 99758.42 | 1436069.6 | 1439547.1 | 9.9989496 | 11.1571755 |
| 0 | 99756.40 | 1430066.6 | 1433558.7 | 9.9989408 | 11.1553563 |

# 4 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan |
|---|---|---|---|---|---|
| 0 | 6975.65 | 6992.68 | 100244.19 | 8.8435845 | 8.8446437 |
| 1 | 7004.66 | 7021.91 | 100246.23 | 8.8453874 | 8.8464554 |
| 2 | 7033.58 | 7051.15 | 100248.28 | 8.8471827 | 8.8482597 |
| 3 | 7062.70 | 7080.38 | 100250.34 | 8.8489707 | 8.8500566 |
| 4 | 7091.71 | 7109.61 | 100252.41 | 8.8507512 | 8.8518461 |
| 5 | 7120.73 | 7138.85 | 100254.49 | 8.8525245 | 8.8536283 |
| 6 | 7149.74 | 7168.09 | 100256.58 | 8.8542905 | 8.8554034 |
| 7 | 7178.76 | 7197.33 | 100258.68 | 8.8560493 | 8.8571713 |
| 8 | 7207.77 | 7226.57 | 100260.78 | 8.8578010 | 8.8589321 |
| 9 | 7236.78 | 7255.81 | 100262.89 | 8.8595457 | 8.8606859 |
| 10 | 7265.80 | 7285.05 | 100265.01 | 8.8612833 | 8.8624327 |
| 11 | 7294.81 | 7314.30 | 100267.14 | 8.8630139 | 8.8641725 |
| 12 | 7323.82 | 7343.54 | 100269.28 | 8.8647376 | 8.8659055 |
| 13 | 7352.83 | 7372.79 | 100271.43 | 8.8664545 | 8 8676317 |
| 14 | 7381.84 | 7402.03 | 100273.58 | 8.8681646 | 8.8693511 |
| 15 | 7410.85 | 7431.28 | 100275.74 | 8.8698680 | 8.8710638 |
| 16 | 7439.86 | 7460.53 | 100277.91 | 8.8715646 | 8.8727699 |
| 17 | 7468.87 | 7489.79 | 100280.09 | 8.8732546 | 8.8744694 |
| 18 | 7497.87 | 7519.04 | 100282.28 | 8.8749381 | 8.8761623 |
| 19 | 7526.88 | 7548.29 | 100284.48 | 8.8766150 | 8.8778487 |
| 20 | 7555.89 | 7577.55 | 100286.68 | 8.8782854 | 8.8795286 |
| 21 | 7584.89 | 7606.80 | 100288.89 | 8.8799493 | 8.8812022 |
| 22 | 7613.90 | 7636.06 | 100291.11 | 8.8816069 | 8.8828694 |
| 23 | 7642.90 | 7665.32 | 100293.34 | 8.8832581 | 8.8845303 |
| 24 | 7671.90 | 7694.58 | 100295.58 | 8.8849031 | 8.8861850 |
| 25 | 7700.91 | 7723.84 | 100297.83 | 8.8865418 | 8.8878334 |
| 26 | 7729.91 | 7753.11 | 100300.09 | 8.8881743 | 8.8894757 |
| 27 | 7758.91 | 7782.37 | 100302.36 | 8.8898007 | 8.8911119 |
| 28 | 7787.91 | 7811.64 | 100304.64 | 8.8914209 | 8.8927420 |
| 29 | 7816.91 | 7840.90 | 100306.93 | 8.8930351 | 8.8943660 |
| 30 | 7845.91 | 7870.17 | 100309.22 | 8.8946433 | 8.8959842 |

## 85 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 99756.40 | 1430066.6 | 1433558.7 | 9.9989408 | 11.1553563 |
| 59 | 99754.37 | 1424113.4 | 1427620.0 | 9.9989319 | 11.1535446 |
| 58 | 99752.33 | 1418209.2 | 1421730.4 | 9.9989230 | 11.1517403 |
| 57 | 99750.28 | 1412353.6 | 1415889.4 | 9.9989141 | 11.1499434 |
| 56 | 99748.22 | 1406545.9 | 1410096.2 | 9.9989052 | 11.1481539 |
| 55 | 99746.15 | 1400785.6 | 1404350.4 | 9.9988962 | 11.1463717 |
| 54 | 99744.07 | 1395071.9 | 1398651.4 | 9.9988871 | 11.1445966 |
| 53 | 99741.99 | 1389404.5 | 1392998.5 | 9.9988780 | 11.1428287 |
| 52 | 99739.90 | 1383782.7 | 1387391.3 | 9.9988689 | 11.1410679 |
| 51 | 99737.80 | 1378206.0 | 1381829.1 | 9.9988598 | 11.1393141 |
| 50 | 99735.69 | 1372673.8 | 1376311.5 | 9.9988506 | 11.1375673 |
| 49 | 99733.57 | 1367185.6 | 1370837.9 | 9.9988414 | 11.1358275 |
| 48 | 99731.44 | 1361740.9 | 1365407.7 | 9.9988321 | 11.1340945 |
| 47 | 99729.31 | 1356339.1 | 1360020.5 | 9.9988228 | 11.1323683 |
| 46 | 99727.17 | 1350979.9 | 1354675.8 | 9.9988135 | 11.1306489 |
| 45 | 99725.02 | 1345662.5 | 1349373.1 | 9.9988041 | 11.1289362 |
| 44 | 99722.86 | 1340386.7 | 1344111.8 | 9.9987947 | 11.1272301 |
| 43 | 99720.69 | 1335151.8 | 1338891.4 | 9.9987853 | 11.1255306 |
| 42 | 99718.51 | 1329957.4 | 1333711.6 | 9.9987758 | 11.1238377 |
| 41 | 99716.32 | 1324803.1 | 1328571.9 | 9.9987663 | 11.1221513 |
| 40 | 99714.13 | 1319688.3 | 1323471.6 | 9.9987567 | 11.1204714 |
| 39 | 99711.93 | 1314612.7 | 1318410.6 | 9.9987471 | 11.1187978 |
| 38 | 99709.72 | 1309575.7 | 1313388.2 | 9.9987375 | 11.1171306 |
| 37 | 99707.50 | 1304576.9 | 1308404.0 | 9.9987278 | 11.1154697 |
| 36 | 99705.27 | 1299616.0 | 1303457.6 | 9.9987181 | 11.1138150 |
| 35 | 99703.03 | 1294692.4 | 1298548.6 | 9.9987084 | 11.1121666 |
| 34 | 99700.79 | 1289805.8 | 1293676.5 | 9.9986986 | 11.1105243 |
| 33 | 99698.54 | 1284955.7 | 1288841.0 | 9.9986888 | 11.1088881 |
| 32 | 99696.28 | 1280141.7 | 1284041.5 | 9.9986790 | 11.1072580 |
| 31 | 99694.01 | 1275363.4 | 1279277.9 | 9.9986691 | 11.1056340 |
| 30 | 99691.73 | 1270620.5 | 1274549.5 | 9.9986591 | 11.1040158 |

# 4 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 7845.91 | 7870.17 | 100309.22 | 8.8946433 | 8.8959842 |
| 31 | 7874.91 | 7899.44 | 100311.52 | 8.8962455 | 8.8975963 |
| 32 | 7903.91 | 7928.71 | 100313.83 | 8.8978418 | 8.8992026 |
| 33 | 7932.90 | 7957.98 | 100316.15 | 8.8994322 | 8.9008030 |
| 34 | 7961.90 | 7987.26 | 100318.48 | 8.9010168 | 8.9023977 |
| 35 | 7990.90 | 8016.53 | 100320.81 | 8.9025955 | 8.9039866 |
| 36 | 8019.89 | 8045.81 | 100323.15 | 8.9041685 | 8.9055697 |
| 37 | 8048.89 | 8075.09 | 100325.50 | 8.9057358 | 8.9071472 |
| 38 | 8077.88 | 8104.37 | 100327.86 | 8.9072975 | 8.9087190 |
| 39 | 8106.87 | 8133.65 | 100330.23 | 8.9088535 | 8.9102853 |
| 40 | 8135.87 | 8162.93 | 100332.61 | 8.9104039 | 8.9118460 |
| 41 | 8164.86 | 8192.21 | 100335.00 | 8.9119487 | 8.9134012 |
| 42 | 8193.85 | 8221.50 | 100337.40 | 8.9134881 | 8.9149509 |
| 43 | 8222.84 | 8250.78 | 100339.80 | 8.9150219 | 8.9164952 |
| 44 | 8251.83 | 8280.07 | 100342.21 | 8.9165504 | 8.9180340 |
| 45 | 8280.82 | 8309.36 | 100344.63 | 8.9180734 | 8.9195675 |
| 46 | 8309.81 | 8338.65 | 100347.06 | 8.9195911 | 8.9210957 |
| 47 | 8338.80 | 8367.94 | 100349.50 | 8.9211034 | 8.9226186 |
| 48 | 8367.78 | 8397.23 | 100351.95 | 8.9226105 | 8.9241363 |
| 49 | 8396.77 | 8426.53 | 100354.41 | 8.9241123 | 8.9256487 |
| 50 | 8425.76 | 8455.83 | 120356.87 | 8.9256089 | 8.9271560 |
| 51 | 8454.74 | 8485.12 | 100359.34 | 8.9271003 | 8.9286581 |
| 52 | 8483.73 | 8514.42 | 100361.82 | 8.9285866 | 8.9301552 |
| 53 | 8512.71 | 8543.72 | 100364.31 | 8.9300678 | 8.9316471 |
| 54 | 8541.69 | 8573.02 | 100366.81 | 8.9315439 | 8.9331340 |
| 55 | 8570.67 | 8602.33 | 100369.32 | 8.9330150 | 8.9346160 |
| 56 | 8599.66 | 8631.63 | 100371.84 | 8.9344811 | 8.9360929 |
| 57 | 8628.64 | 8660.94 | 100374.36 | 8.9359422 | 8.9375650 |
| 58 | 8657.62 | 8690.25 | 100376.89 | 8.9373983 | 8.9390321 |
| 59 | 8686.60 | 8719.56 | 100379.43 | 8.9388496 | 8.9404944 |
| 60 | 8715.57 | 8748.87 | 100381.98 | 8.9402960 | 8.9419518 |

# 85 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 99691.73 | 1270620.5 | 1274549.5 | 9.9986591 | 11.1040158 |
| 29 | 99689.44 | 1265912.5 | 1269856.0 | 9.9986492 | 11.1024037 |
| 28 | 99687.15 | 1261239.0 | 1265197.1 | 9.9986392 | 11.1007974 |
| 27 | 99684.85 | 1256599.7 | 1260572.4 | 9.9986292 | 11.0991970 |
| 26 | 99682.54 | 1251994.2 | 1255981.5 | 9.9986191 | 11.0976023 |
| 25 | 99680.22 | 1247422.1 | 1251424.0 | 9.9986090 | 11.0960134 |
| 24 | 99677.89 | 1242883.1 | 1246899.5 | 9.9985988 | 11.0944303 |
| 23 | 99675.55 | 1238376.8 | 1242407.8 | 9.9985886 | 11.0928528 |
| 22 | 99673.20 | 1233902.8 | 1237948.4 | 9.9985784 | 11.0912810 |
| 21 | 99670.85 | 1229460.8 | 1233521.0 | 9.9985682 | 11.0897147 |
| 20 | 99668.49 | 1225050.6 | 1229125.2 | 9.9985579 | 11.0881540 |
| 19 | 99666.12 | 1220671.6 | 1224760.8 | 9.9985475 | 11.0865988 |
| 18 | 99663.74 | 1216323.6 | 1220427.4 | 9.9985372 | 11.0850491 |
| 17 | 99661.35 | 1212006.2 | 1216124.6 | 9.9985268 | 11.0835048 |
| 16 | 99658.95 | 1207719.2 | 1211852.2 | 9.9985163 | 11.0819660 |
| 15 | 99656.55 | 1203462.2 | 1207609.8 | 9.9985058 | 11.0804325 |
| 14 | 99654.14 | 1199234.9 | 1203397.0 | 9.9984953 | 10.0789043 |
| 13 | 99651.72 | 1195037.0 | 1199213.7 | 9.9984848 | 11.0773814 |
| 12 | 99649.29 | 1190868.2 | 1195059.5 | 9.9984742 | 11.0758637 |
| 11 | 99646.85 | 1186728.2 | 1190934.0 | 9.9984636 | 11.0743513 |
| 10 | 99644.40 | 1182616.7 | 1186837.0 | 9.9984529 | 11.0728440 |
| 9 | 99641.94 | 1178533.3 | 1182768.3 | 9.9984422 | 11.0713419 |
| 8 | 99639.48 | 1174477.9 | 1178727.4 | 9.9984315 | 11.0698448 |
| 7 | 99637.01 | 1170450.0 | 1174714.1 | 9.9984207 | 11.0683529 |
| 6 | 96634.53 | 1166449.5 | 1170728.2 | 9.9984099 | 11.0668660 |
| 5 | 99632.04 | 1162476.1 | 1166769.3 | 9.9983990 | 11.0653840 |
| 4 | 99629.54 | 1158529.4 | 1162837.2 | 9.9983881 | 11.0639071 |
| 3 | 99627.03 | 1154609.3 | 1158931.6 | 9.9983772 | 11.0624350 |
| 2 | 99624.52 | 1150715.4 | 1155052.3 | 9.9983663 | 11.0609679 |
| 1 | 99622.00 | 1146847.4 | 1151199.0 | 9.9983553 | 11.0595056 |
| 0 | 99619.47 | 1143005.2 | 1147371.3 | 9.9983442 | 11.0580482 |

# 5 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 8715.57 | 8748.87 | 100381.98 | 8.9402960 | 8.9419518 |
| 1 | 8744.55 | 8778.18 | 100384.54 | 8.9417376 | 8.9434044 |
| 2 | 8773.53 | 8807.49 | 100387.11 | 8.9431743 | 8.9448523 |
| 3 | 8802.51 | 8836.81 | 100389.69 | 8.9446063 | 8.9462954 |
| 4 | 8831.48 | 8866.12 | 100392.28 | 8.9460335 | 8.9477338 |
| 5 | 8860.46 | 8895.44 | 100394.87 | 8.9474561 | 8.9491676 |
| 6 | 8889.43 | 8924.76 | 100397.47 | 8.9488739 | 8.9505967 |
| 7 | 8918.40 | 8954.08 | 100400.08 | 8.9502871 | 8.9520211 |
| 8 | 8947.38 | 8983.41 | 100402.70 | 8.9516957 | 8.9534410 |
| 9 | 8976.35 | 9012.73 | 100405.33 | 8.9530996 | 8.9548564 |
| 10 | 9005.32 | 9042.06 | 100407.97 | 8.9544991 | 8.9562672 |
| 11 | 9034.29 | 9071.38 | 100410.61 | 8.9558940 | 8.9576735 |
| 12 | 9063.26 | 9100.71 | 100413.26 | 8.9572843 | 8.9590754 |
| 13 | 9092.23 | 9130.04 | 100415.92 | 8.9586703 | 8.9604728 |
| 14 | 9121.19 | 9159.38 | 100418.59 | 8.9600517 | 8.9618659 |
| 15 | 9150.16 | 9188.71 | 100421.27 | 8.9614288 | 8.9632545 |
| 16 | 9179.13 | 9218.04 | 100423.96 | 8.9628014 | 8.9646388 |
| 17 | 9208.09 | 9247.38 | 100426.66 | 8.9641697 | 8.9660188 |
| 18 | 9237.06 | 9276.72 | 100429.37 | 8.9655337 | 8.9673944 |
| 19 | 9266.02 | 9306.06 | 100432.08 | 8.9668934 | 8.9687658 |
| 20 | 9294.99 | 9335.40 | 100434.80 | 8.9682487 | 8.9701330 |
| 21 | 9323.95 | 9364.74 | 100437.53 | 8.9695999 | 8.9714959 |
| 22 | 9352.91 | 9394.09 | 100440.27 | 8.9709468 | 8.9728547 |
| 23 | 9381.87 | 9423.44 | 100443.02 | 8.9722895 | 8.9742092 |
| 24 | 9410.83 | 9452.78 | 100445.78 | 8.9736280 | 8.9755597 |
| 25 | 9439.79 | 9482.13 | 100448.55 | 8.9749624 | 8.9769060 |
| 26 | 9468.75 | 9511.48 | 100451.33 | 8.9762926 | 8.9782483 |
| 27 | 9497.71 | 9540.84 | 100454.11 | 8.9776188 | 8.9795865 |
| 28 | 9526.66 | 9570.19 | 100456.90 | 8.9789408 | 8.9809206 |
| 29 | 9555.62 | 9599.55 | 100459.70 | 8.9802589 | 8.9822507 |
| 30 | 9584.58 | 9628.90 | 100462.51 | 8.9815729 | 8.9835769 |

# 84 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan.* |
|---|---|---|---|---|---|
| 60 | 99619.47 | 1143005.2 | 1147371.3 | 9.9983442 | 11.0580482 |
| 59 | 99616.93 | 1139188.5 | 1143569.2 | 9.9983332 | 11.0565956 |
| 58 | 99614.38 | 1135397.0 | 1139792.2 | 9.9983220 | 11.0551477 |
| 57 | 99611.82 | 1131630.4 | 1136040.2 | 9.9983109 | 11.0537046 |
| 56 | 99609.26 | 1127888.5 | 1132312.9 | 9.9982997 | 11.0522662 |
| 55 | 99606.69 | 1124171.2 | 1128610.1 | 9.9982885 | 11.0508324 |
| 54 | 99604.11 | 1120478.0 | 1124931.6 | 9.9982772 | 11.0494033 |
| 53 | 99601.52 | 1116808.9 | 1121277.0 | 9.9982660 | 11.0479789 |
| 52 | 99598.92 | 1113163.5 | 1117646.2 | 9.9982546 | 11.0465590 |
| 51 | 99596.31 | 1109541.6 | 1114038.9 | 9.9982433 | 11.0451436 |
| 50 | 99593.69 | 1105943.1 | 1110454.9 | 9.9982318 | 11.0437328 |
| 49 | 99591.07 | 1102367.6 | 1106894.0 | 9.9982204 | 11.0423265 |
| 48 | 99588.44 | 1098815.0 | 1103356.0 | 9.9982089 | 11.0409246 |
| 47 | 99585.80 | 1095285.0 | 1099840.6 | 9.9981974 | 11.0395272 |
| 46 | 99583.15 | 1091777.5 | 1096347.6 | 9.9981859 | 11.0381341 |
| 45 | 99580.49 | 1088292.1 | 1092876.8 | 9.9981743 | 11.0367455 |
| 44 | 99577.82 | 1084828.8 | 1089428.1 | 9.9981626 | 11.0353612 |
| 43 | 99575.15 | 1081387.2 | 1086001.1 | 9.9981510 | 11.0339812 |
| 42 | 99572.47 | 1077967.3 | 1082595.7 | 9.9981393 | 11.0326056 |
| 41 | 99569.78 | 1074568.7 | 1079211.7 | 9.9981275 | 11.0312342 |
| 40 | 99567.08 | 1071191.3 | 1075848.8 | 9.9981158 | 11.0298670 |
| 39 | 99564.37 | 1067834.8 | 1072507.0 | 9.9981040 | 11.0285041 |
| 38 | 99561.65 | 1064499.2 | 1069185.9 | 9.9980921 | 11.0271453 |
| 37 | 99558.92 | 1061184.1 | 1065885.4 | 9.9980802 | 11.0257908 |
| 36 | 99556.19 | 1057889.5 | 1062605.4 | 9.9980683 | 11.0244403 |
| 35 | 99553.45 | 1054615.1 | 1059345.5 | 9.9980563 | 11.0230940 |
| 34 | 99550.70 | 1051360.7 | 1056105.7 | 9.9980443 | 11.0217517 |
| 33 | 99547.94 | 1048126.1 | 1052885.7 | 9.9980323 | 11.0204135 |
| 32 | 99545.17 | 1044911.2 | 1049685.4 | 9.9980202 | 11.0190794 |
| 31 | 99542.40 | 1041715.8 | 1046504.6 | 9.9980081 | 11.0177493 |
| 30 | 99539.62 | 1038539.7 | 1043343.0 | 9.9979960 | 11.0164231 |

# 5 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 9584.58 | 9628.90 | 100462.51 | 8.9815729 | 8.9835769 |
| 31 | 9613.53 | 9658.26 | 100465.33 | 8.9828829 | 8.9848991 |
| 32 | 9642.48 | 9687.63 | 100468.16 | 8.9841889 | 8.9862173 |
| 33 | 9671.44 | 9716.99 | 100470.99 | 8.9854910 | 8.9875317 |
| 34 | 9700.39 | 9746.35 | 100473.83 | 8.9867891 | 8.9888421 |
| 35 | 9729.34 | 9775.72 | 100476.68 | 8.9880834 | 8.9901487 |
| 36 | 9758.29 | 9805.09 | 100479.54 | 8.9893737 | 8.9914514 |
| 37 | 9787.24 | 9834.46 | 100482.41 | 8.9906602 | 8.9927503 |
| 38 | 9816.19 | 9863.83 | 100485.29 | 8.9919429 | 8.9940454 |
| 39 | 9845.14 | 9893.20 | 100488.18 | 8.9932217 | 8.9953367 |
| 40 | 9874.08 | 9922.57 | 100491.08 | 8.9944968 | 8.9966243 |
| 41 | 9903.03 | 9951.95 | 100493.99 | 8.9957681 | 8.9979081 |
| 42 | 9931.97 | 9981.33 | 100496.90 | 8.9970356 | 8.9991883 |
| 43 | 9960.92 | 10010.71 | 100499.82 | 8.9982994 | 9.0004647 |
| 44 | 9989.86 | 10040.09 | 100502.75 | 8.9995595 | 9.0017375 |
| 45 | 10018.81 | 10069.47 | 100505.69 | 9.0008160 | 9.0030066 |
| 46 | 10047.75 | 10098.85 | 100508.64 | 9.0020687 | 9.0042721 |
| 47 | 10076.69 | 10128.24 | 100511.60 | 9.0033179 | 9.0055340 |
| 48 | 10105.63 | 10157.63 | 100514.57 | 9.0045634 | 9.0067924 |
| 49 | 10134.57 | 10187.02 | 100517.54 | 9.0058053 | 9.0080471 |
| 50 | 10163.50 | 10216.41 | 100520.52 | 9.0070436 | 9.0092984 |
| 51 | 10192.45 | 10245.80 | 100523.51 | 9.0082784 | 9.0105461 |
| 52 | 10221.38 | 10275.20 | 100526.51 | 9.0095096 | 9.0117903 |
| 53 | 10250.32 | 10304.60 | 100529.52 | 9.0107374 | 9.0130310 |
| 54 | 10279.25 | 10334.00 | 100532.54 | 9.0119616 | 9.0142682 |
| 55 | 10308.19 | 10363.40 | 100535.57 | 9.0131823 | 9.0155021 |
| 56 | 10337.12 | 10392.80 | 100538.60 | 9.0143996 | 9.0167325 |
| 57 | 10366.05 | 10422.20 | 100541.64 | 9.0156135 | 9.0179594 |
| 58 | 10394.99 | 10451.60 | 100544.69 | 9.0168239 | 9.0191831 |
| 59 | 10423.92 | 10481.01 | 100547.75 | 9.0180309 | 9.0204033 |
| 60 | 10452.85 | 10510.42 | 100550.82 | 9.0192346 | 9.0216202 |

# 84 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 99539.62 | 1038539.7 | 1043343.0 | 9.9979960 | 11.0164231 |
| 29 | 99536.83 | 1035382.7 | 1040200.7 | 9.9979838 | 11.0151009 |
| 28 | 99534.03 | 1032244.7 | 1037077.2 | 9.9979716 | 11.0137827 |
| 27 | 99531.22 | 1029125.5 | 1033972.6 | 9.9979593 | 11.0124683 |
| 26 | 99528.40 | 1026024.9 | 1030886.6 | 9.9979470 | 11.0111579 |
| 25 | 99525.57 | 1022942.8 | 1027819.0 | 9.9979347 | 11.0098513 |
| 24 | 99522.74 | 1019878.9 | 1024769.7 | 9.9979223 | 11.0085486 |
| 23 | 99519.90 | 1016833.2 | 1021738.5 | 9.9979099 | 11.0072497 |
| 22 | 99517.05 | 1013805.4 | 1018725.4 | 9.9978975 | 11.0059546 |
| 21 | 99514.19 | 1010795.4 | 1015730.0 | 9.9978850 | 11.0046633 |
| 20 | 99511.32 | 1007803.1 | 1012752.2 | 9.9978725 | 11.0033757 |
| 19 | 99508.44 | 1004828.3 | 1009792.0 | 9.9978599 | 11.0020918 |
| 18 | 99505.55 | 1001870.8 | 1006849.1 | 9.9978473 | 11.0008117 |
| 17 | 99502.66 | 998930.50 | 1003923.4 | 9.9978347 | 10.9995353 |
| 16 | 99499.76 | 996007.24 | 1001014.7 | 9.9978220 | 10.9982625 |
| 15 | 99496.85 | 993100.88 | 998122.91 | 9.9978093 | 10.9969934 |
| 14 | 99493.93 | 990211.25 | 995247.87 | 9.9977966 | 10.9957279 |
| 13 | 99491.00 | 987338.23 | 992389.43 | 9.9977838 | 10.9944660 |
| 12 | 99488.06 | 984481.66 | 989547.44 | 9.9977710 | 10.9932076 |
| 11 | 99485.12 | 981641.40 | 986721.76 | 9.9977582 | 10.9919529 |
| 10 | 99482.17 | 978817.32 | 983912.27 | 9.9977453 | 10.9907016 |
| 9 | 99479.21 | 976009.27 | 981118,80 | 9.9977323 | 10.9894539 |
| 8 | 99476.24 | 973217.13 | 978341.24 | 9.9977194 | 10.9882097 |
| 7 | 99473.26 | 970440.75 | 975579.44 | 9.9977064 | 10.9869690 |
| 6 | 99470.27 | 967680.00 | 972833.27 | 9.9976933 | 10.9857318 |
| 5 | 99467.28 | 964934.75 | 970102.60 | 9.9976803 | 10.9844979 |
| 4 | 99464.28 | 962204.86 | 967387.30 | 9.9976672 | 10.9832675 |
| 3 | 99461.27 | 959490.22 | 964687.24 | 9.9976540 | 10.9820406 |
| 2 | 99458.25 | 956790.68 | 962002.29 | 9.9976408 | 10.9808169 |
| 1 | 99455.22 | 954106.13 | 959332.33 | 9.9976276 | 10.9795967 |
| 0 | 99452.18 | 951436.45 | 956677.22 | 9.9976143 | 10.9783798 |

# 6 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan |
|---|---|---|---|---|---|
| 0 | 10452.85 | 10510.42 | 100550.82 | 9.0192346 | 9.0216202 |
| 1 | 10481.78 | 10539.83 | 100553.90 | 9.0204348 | 9.0228338 |
| 2 | 10510.70 | 10569.24 | 100556.99 | 9.0216318 | 9.0240441 |
| 3 | 10539.63 | 10598.66 | 100560.09 | 9.0228254 | 9.0252510 |
| 4 | 10568.56 | 10628.08 | 100563.20 | 9.0240157 | 9.0264548 |
| 5 | 10597.48 | 10657.50 | 100566.31 | 9.0252027 | 9.0276552 |
| 6 | 10626.41 | 10686.92 | 100569.43 | 9.0263865 | 9.0288524 |
| 7 | 10655.33 | 10716.34 | 100572.56 | 9.0275669 | 9.0300464 |
| 8 | 10684.25 | 10745.76 | 100575.70 | 9.0287442 | 9.0312373 |
| 9 | 10713.18 | 10775.19 | 100578.85 | 9.0299182 | 9.0324249 |
| 10 | 10742.10 | 10804.62 | 100582.01 | 9.0310890 | 9.0336093 |
| 11 | 10771.02 | 10834.05 | 100585.18 | 9.0322567 | 9.0347906 |
| 12 | 10799.94 | 10863.48 | 100588.35 | 9.0334212 | 9.0359688 |
| 13 | 10828.85 | 10892.91 | 100591.53 | 9.0345825 | 9.0371439 |
| 14 | 10857.77 | 10922.34 | 100594.72 | 9.0357407 | 9.0383159 |
| 15 | 10886.69 | 10951.78 | 100597.92 | 9.0368958 | 9.0394848 |
| 16 | 10915.60 | 10981.22 | 100601.13 | 9.0380477 | 9.0406506 |
| 17 | 10944.52 | 11010.66 | 100604.35 | 9.0391966 | 9.0418134 |
| 18 | 10973.43 | 11040.10 | 100607.58 | 9.0403424 | 9.0429731 |
| 19 | 11002.34 | 11069.54 | 100610.81 | 9.0414852 | 9.0441299 |
| 20 | 11031.26 | 11098.99 | 100614.05 | 9.0426249 | 9.0452836 |
| 21 | 11060.17 | 11128.44 | 100617.30 | 9.0437617 | 9.0464343 |
| 22 | 11089.08 | 11157.89 | 100620.56 | 9.0448954 | 9.0475821 |
| 23 | 11117.99 | 11187.34 | 100623.83 | 9.0460261 | 9.0487270 |
| 24 | 11146.89 | 11216.79 | 100627.11 | 9.0471538 | 9.0498689 |
| 25 | 11175.80 | 11246.25 | 100630.40 | 9.0482786 | 9.0510078 |
| 26 | 11204.71 | 11275.71 | 100633.70 | 9.0494005 | 9.0521439 |
| 27 | 11233.61 | 11305.17 | 100637.01 | 9.0505194 | 9.0532771 |
| 28 | 11262.52 | 11334.63 | 100640.32 | 9.0516354 | 9.0544074 |
| 29 | 11291.42 | 11364.09 | 100643.64 | 9.0527485 | 9.0555349 |
| 30 | 11320.32 | 11393.56 | 100646.97 | 9.0538588 | 9.0566595 |

## 83 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tang |
|---|---|---|---|---|---|
| 60 | 99452.18 | 951436.45 | 956677.22 | 9.9976143 | 10.9783798 |
| 59 | 99449.14 | 948781.49 | 954036.86 | 9.9976011 | 10.9771662 |
| 58 | 99446.09 | 946141.16 | 951411.10 | 9.9975877 | 10.9759559 |
| 57 | 99443.03 | 943515.31 | 948799.84 | 9.9975743 | 10.9747490 |
| 56 | 99439.96 | 940903.84 | 946202.96 | 9.9975609 | 10.9735452 |
| 55 | 99436.88 | 938306.63 | 943620.33 | 9.9975475 | 10.9723448 |
| 54 | 99433.79 | 935723.55 | 941051.84 | 9.9975340 | 10.9711476 |
| 53 | 99430.69 | 933154.50 | 938497.38 | 9.9975205 | 10.9699536 |
| 52 | 99427.59 | 930599.36 | 935956.82 | 9.9975069 | 10.9687627 |
| 51 | 99424.48 | 928058.02 | 933430.06 | 9.9974933 | 10.9675751 |
| 50 | 99421.36 | 925530.35 | 930916.99 | 9.9974797 | 10.9663907 |
| 49 | 99418.23 | 923016.27 | 928417.49 | 9.9974660 | 10.9652094 |
| 48 | 99415.09 | 920515.64 | 925931.45 | 9.9974523 | 10.9640312 |
| 47 | 99411.94 | 918028.38 | 923458.77 | 9.9974386 | 10.9628561 |
| 46 | 99408.79 | 915554.36 | 920999.34 | 9.9974248 | 10.9616841 |
| 45 | 99405.63 | 913093.48 | 918553.05 | 9.9974110 | 10.9605152 |
| 44 | 99402.46 | 910645.64 | 916119.80 | 9.9973971 | 10.9593494 |
| 43 | 99399.28 | 908210.74 | 913699.49 | 9.9973833 | 10.9581866 |
| 42 | 99396.09 | 905788.67 | 911292.00 | 9.9973693 | 10.9570269 |
| 41 | 99392.89 | 903379.33 | 908897.25 | 9.9973554 | 10.9558701 |
| 40 | 99389.69 | 900982.61 | 906515.12 | 9.9973414 | 10.9547164 |
| 39 | 99386.48 | 898598.43 | 904145.53 | 9.9973273 | 10.9535657 |
| 38 | 99383.26 | 896226.68 | 901788.37 | 9.9973132 | 10.9524179 |
| 37 | 99380.03 | 893867.26 | 899443.54 | 9.9972991 | 10.9512730 |
| 36 | 99376.79 | 891520.08 | 897110.95 | 9.9972850 | 10.9501311 |
| 35 | 99373.54 | 889185.05 | 894790.51 | 9.9972708 | 10.9489922 |
| 34 | 99370.28 | 886862.06 | 892482.11 | 9.9972566 | 10.9478561 |
| 33 | 99367.02 | 884551.03 | 890185.67 | 9.9972423 | 10.9467229 |
| 32 | 99363.75 | 882251.86 | 887901.09 | 9.9972280 | 10.9455926 |
| 31 | 99360.47 | 879964.46 | 885628.28 | 9.9972137 | 10.9444651 |
| 30 | 99357.18 | 877688.74 | 883367.15 | 9.9971993 | 10.9433405 |

# 6 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 11320.32 | 11393.56 | 100646.97 | 9.0538588 | 9.0566595 |
| 31 | 11349.22 | 11423.03 | 100650.31 | 9.0549661 | 9.0577813 |
| 32 | 11378.12 | 11452.50 | 100653.66 | 9.0560706 | 9.0589002 |
| 33 | 11407.02 | 11481.97 | 100657.02 | 9.0571723 | 9.0600164 |
| 34 | 11435.92 | 11511.44 | 100660.39 | 9.0582711 | 9.0611297 |
| 35 | 11464.82 | 11540.91 | 100663.77 | 9.0593672 | 9.0622403 |
| 36 | 11493.71 | 11570.39 | 100667.15 | 9.0604604 | 9.0633482 |
| 37 | 11522.61 | 11599.87 | 100670.54 | 9.0615509 | 9.0644533 |
| 38 | 11551.51 | 11629.35 | 100673.94 | 9.0626386 | 9.0655556 |
| 39 | 11580.40 | 11658.83 | 100677.35 | 9.0637235 | 9.0666553 |
| 40 | 11609.29 | 11688.31 | 100680.77 | 9.0648057 | 9.0677522 |
| 41 | 11638.18 | 11717.80 | 100684.20 | 9.0658852 | 9.0688465 |
| 42 | 11667.07 | 11747.29 | 100687.64 | 9.0669619 | 9.0699381 |
| 43 | 11695.96 | 11776.78 | 100691.08 | 9.0680360 | 9.0710270 |
| 44 | 11724.85 | 11806.28 | 100694.53 | 9.0691074 | 9.0721133 |
| 45 | 11753.74 | 11835.78 | 100697.99 | 9.0701761 | 9.0731969 |
| 46 | 11782.63 | 11865.28 | 100701.46 | 9.0712421 | 9.0742779 |
| 47 | 11811.51 | 11894.78 | 100704.94 | 9.0723055 | 9.0753563 |
| 48 | 11840.40 | 11924.28 | 100708.43 | 9.0733663 | 9.0764321 |
| 49 | 11869.28 | 11953.78 | 100711.93 | 9.0744244 | 9.0775053 |
| 50 | 11898.16 | 11983.28 | 100715.44 | 9.0754799 | 9.0785760 |
| 51 | 11927.04 | 12012.79 | 100718.96 | 9.0765329 | 9.0796441 |
| 52 | 11955.93 | 12042.30 | 100722.48 | 9.0775832 | 9.0807096 |
| 53 | 11984.81 | 12071.81 | 100726.01 | 9.0786310 | 9.0817726 |
| 54 | 12013.68 | 12101.32 | 100729.55 | 9.0796762 | 9.0828331 |
| 55 | 12042.56 | 12130.84 | 100733.10 | 9.0807189 | 9.0838911 |
| 56 | 12071.44 | 12160.36 | 100736.66 | 9.0817590 | 9.0849466 |
| 57 | 12100.31 | 12189.88 | 100740.23 | 9.0827966 | 9.0859996 |
| 58 | 12129.19 | 12219.40 | 100743.81 | 9.0838317 | 9.0870501 |
| 59 | 12158.06 | 12248.93 | 100747.40 | 9.0848643 | 9.0880981 |
| 60 | 12186.93 | 12278.46 | 100750.99 | 9.0858945 | 9.0891438 |

# 83 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 99357.18 | 877688.74 | 883367.15 | 9.9971993 | 10.9433405 |
| 29 | 99353.88 | 875424.61 | 881117.61 | 9.9971849 | 10.9422187 |
| 28 | 99350.58 | 873171.98 | 878879.57 | 9.9971704 | 10.9410998 |
| 27 | 99347.27 | 870930.77 | 876652.95 | 9.9971559 | 10.9399836 |
| 26 | 99343.95 | 868700.88 | 874437.66 | 9.9971414 | 10.9388703 |
| 25 | 99340.62 | 866482.23 | 972233.61 | 9.9971268 | 10.9377597 |
| 24 | 99337.28 | 864274.75 | 870040.71 | 9.9971122 | 10.9366518 |
| 23 | 99333.93 | 862078.33 | 867858.89 | 9.9970976 | 10.9355467 |
| 22 | 99330.57 | 859892.90 | 865688,05 | 9.9970829 | 10.9344444 |
| 21 | 99327.20 | 857718.38 | 863528.12 | 9.9970682 | 10.9333447 |
| 20 | 99323.83 | 955554.68 | 861379.01 | 9.9970535 | 10.9322478 |
| 19 | 99320.45 | 853401.72 | 859240.65 | 9.9970387 | 10.9311535 |
| 18 | 99317.06 | 851259.43 | 957112.95 | 9.9970239 | 10.9300619 |
| 17 | 99313.66 | 849127.72 | 854995.84 | 9.9970090 | 10.9289730 |
| 16 | 99310.25 | 847006.51 | 852889.23 | 9.9969941 | 10.9278867 |
| 15 | 99306.84 | 844895.73 | 850793.04 | 9.9969792 | 10.9268031 |
| 14 | 99303.42 | 842795.31 | 848707.21 | 9.9969642 | 10.9257221 |
| 13 | 99299.99 | 840705.15 | 846631.65 | 9.9969492 | 10.9246437 |
| 12 | 99296.55 | 838625.19 | 844566.29 | 9.9969342 | 10.9235679 |
| 11 | 99293.10 | 836555.36 | 842511.05 | 9.9969191 | 10.9224947 |
| 10 | 99289.64 | 834495.57 | 840465.86 | 9.9969040 | 10.9214240 |
| 9 | 99286.17 | 832445.77 | 838430.65 | 9.9968888 | 10.9203559 |
| 8 | 99282.70 | 830405.86 | 836405.34 | 9.9968736 | 10.9192904 |
| 7 | 99279.22 | 828375.79 | 834389.86 | 9.9968584 | 10.9182274 |
| 6 | 99275.73 | 826355.47 | 832384.15 | 9.9968431 | 10.9171669 |
| 5 | 99272.23 | 824344.85 | 830388.12 | 9.9968278 | 10.9161089 |
| 4 | 99268.72 | 822343.84 | 828401.71 | 9.9968125 | 10.9150534 |
| 3 | 99265.21 | 820352.39 | 826424.85 | 9.9967971 | 10.9140004 |
| 2 | 99261.69 | 818370.41 | 824457.48 | 9.9967817 | 10.9129499 |
| 1 | 99258.16 | 816397.86 | 822499.52 | 9.9967662 | 10.9119019 |
| 0 | 99254.62 | 814434.64 | 820550.90 | 9.9967507 | 10.9108562 |

# 7 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 12186.93 | 12278.46 | 100750.99 | 9.0858945 | 9.0891438 |
| 1 | 12215.81 | 12307.99 | 100754.59 | 9.0869221 | 9.0901869 |
| 2 | 12244.68 | 12337.52 | 100758.20 | 9.0879473 | 9.0912277 |
| 3 | 12273.55 | 12367.05 | 100761.82 | 9.0889700 | 9.0922660 |
| 4 | 12302.41 | 12396.58 | 100765.45 | 9.0899903 | 9.0933020 |
| 5 | 12331.28 | 12426.12 | 100769.09 | 9.0910082 | 9.0943355 |
| 6 | 12360.15 | 12455.66 | 100772.74 | 9.0920237 | 9.0953669 |
| 7 | 12389.01 | 12485.20 | 100776.39 | 9.0930367 | 9.0963955 |
| 8 | 12417.88 | 12514.74 | 100780.05 | 9.0940474 | 9.0974219 |
| 9 | 12446.74 | 12544.29 | 100783.72 | 9.0950556 | 9.0984460 |
| 10 | 12475.60 | 12573.84 | 100787.40 | 9.0960615 | 9.0994678 |
| 11 | 12504.46 | 12603.39 | 100791.09 | 9.0970651 | 9.1004872 |
| 12 | 12533.32 | 12632.94 | 100794.79 | 9.0980662 | 9.1015044 |
| 13 | 12562.18 | 12662.49 | 100798.50 | 9.0990651 | 9.1025192 |
| 14 | 12591.04 | 12692.05 | 100802.22 | 9.1000616 | 9.1035317 |
| 15 | 12619.90 | 12721.61 | 100805.95 | 9.1010558 | 9.1045420 |
| 16 | 12648.75 | 12751.17 | 100809.69 | 9.1020477 | 9.1055500 |
| 17 | 12677.61 | 12780.73 | 100813.43 | 9.1030373 | 9.1065557 |
| 18 | 12706.46 | 12810.29 | 100817.18 | 9.1040246 | 9.1075591 |
| 19 | 12735.31 | 12839.86 | 100820.94 | 9.1050096 | 9.1085604 |
| 20 | 12764.16 | 12869.43 | 100824.71 | 9.1059924 | 9.1095594 |
| 21 | 12793.01 | 12899.00 | 100828.49 | 9.1069729 | 9.1105562 |
| 22 | 12821.86 | 12928.57 | 100832.28 | 9.1079512 | 9.1115508 |
| 23 | 12850.71 | 12958.15 | 100836.07 | 9.1089272 | 9.1125431 |
| 24 | 12879.56 | 12987.73 | 100839.88 | 9.1099010 | 9.1135333 |
| 25 | 12908.41 | 13017.31 | 100843.70 | 9.1108726 | 9.1145213 |
| 26 | 12937.25 | 13046.89 | 100847.52 | 9.1118420 | 9.1155072 |
| 27 | 12966.09 | 13076.48 | 100851.35 | 9.1128092 | 9.1164909 |
| 28 | 12994.94 | 13106.07 | 100855.19 | 9.1137742 | 9.1174724 |
| 29 | 13023.78 | 13135.66 | 100859.04 | 9.1147370 | 9.1184518 |
| 30 | 13052.62 | 13165.25 | 100862.90 | 9.1156977 | 9.1194291 |

# 82 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 99254.62 | 814434.64 | 820550.90 | 9.9967507 | 10.9108562 |
| 59 | 99251.07 | 812480.71 | 818611.57 | 9.9967352 | 10.9098131 |
| 58 | 99247.51 | 810535.99 | 816681.45 | 9.9967196 | 10.9087723 |
| 57 | 99243.94 | 808600.42 | 814760.48 | 9.9967040 | 10.9077340 |
| 56 | 99240.36 | 806673.94 | 812848.60 | 9.9966884 | 10.9066980 |
| 55 | 99236.78 | 804756.47 | 810945.73 | 9.9966727 | 10.9056645 |
| 54 | 99233.19 | 802847.96 | 809051.82 | 9.9966570 | 10.9046333 |
| 53 | 99229.59 | 800948.35 | 807166.81 | 9.9966412 | 10.9036045 |
| 52 | 99225.98 | 799057.56 | 805290.62 | 9.9966254 | 10.9025781 |
| 51 | 99222.36 | 797175.55 | 803423.21 | 9.9966096 | 10.9015540 |
| 50 | 99218.74 | 795302.24 | 801564.50 | 9.9965937 | 10.9005322 |
| 49 | 99215.11 | 793437.58 | 799714.45 | 9.9965778 | 10.8995128 |
| 48 | 99211.47 | 791581.51 | 797872.98 | 9.9965619 | 10.8984956 |
| 47 | 99207.82 | 789733.96 | 796040.03 | 9.9965459 | 10.8974808 |
| 46 | 99204.16 | 787894.89 | 794215.56 | 9.9965299 | 10.8964683 |
| 45 | 99200.49 | 786064.23 | 792399.50 | 9.9965138 | 10.8954580 |
| 44 | 99196.81 | 784241.91 | 790591.79 | 9.9964977 | 10.8944500 |
| 43 | 99193.13 | 782427.90 | 788792.38 | 9.9964816 | 10.8934443 |
| 42 | 99189.44 | 780622.12 | 787001.20 | 9.9964655 | 10.8924409 |
| 41 | 99185.74 | 778824.53 | 785218.21 | 9.9964493 | 10.8914396 |
| 40 | 99182.03 | 777035.06 | 783443.35 | 9.9964330 | 10.8904406 |
| 39 | 99178.31 | 775253.66 | 781676.56 | 9.9964167 | 10.8894438 |
| 38 | 99174.59 | 773480.28 | 779917.78 | 9.9964004 | 10.8884492 |
| 37 | 99170.86 | 771714.86 | 778166.97 | 9.9963841 | 10.8874569 |
| 36 | 99167.12 | 769957.35 | 776424.06 | 9.9963677 | 10.8864667 |
| 35 | 99163.37 | 768207.69 | 774689.01 | 9.9963513 | 10.8854787 |
| 34 | 99159.61 | 766465.84 | 772961.76 | 9.9963348 | 10.8844928 |
| 33 | 99155.84 | 764731.74 | 771242.27 | 9.9963183 | 10.8835091 |
| 32 | 99152.06 | 763005.33 | 769530.47 | 9.9963018 | 10.8825276 |
| 31 | 99148.28 | 761286.57 | 767826.31 | 9.9962852 | 10.8815482 |
| 30 | 99144.49 | 759575.41 | 766129.76 | 9.9962686 | 10.8805709 |

# 7 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 13052.62 | 13165.25 | 100862.90 | 9.1156977 | 9.1194291 |
| 31 | 13081.46 | 13194.84 | 100866.77 | 9.1166562 | 9.1204043 |
| 32 | 13110.30 | 13224.44 | 100870.65 | 9.1176125 | 9.1213773 |
| 33 | 13139.13 | 13254.04 | 100874.53 | 9.1185667 | 9.1223482 |
| 34 | 13167.97 | 13283.64 | 100878.42 | 9.1195188 | 9.1233171 |
| 35 | 13196.81 | 13313.24 | 100882.32 | 9.1204688 | 9.1242839 |
| 36 | 13225.64 | 13342.85 | 100886.23 | 9.1214167 | 9.1252486 |
| 37 | 13254.47 | 13372.46 | 100890.15 | 9.1223624 | 9.1262112 |
| 38 | 13283.30 | 13402.07 | 100894.08 | 9.1233061 | 9.1271718 |
| 39 | 13312.13 | 13431.68 | 100898.02 | 9.1242477 | 9.1281303 |
| 40 | 13340.96 | 13461.29 | 100901.97 | 9.1251872 | 9.1290868 |
| 41 | 13369.79 | 13490.91 | 100905.92 | 9.1261246 | 9.1300413 |
| 42 | 13398.62 | 13520.53 | 100909.88 | 9.1270600 | 9.1309937 |
| 43 | 13427.44 | 13550.15 | 100913.85 | 9.1279934 | 9.1319442 |
| 44 | 13456.27 | 13579.77 | 100917.83 | 9.1289247 | 9.1328926 |
| 45 | 13485.09 | 13609.40 | 100921.82 | 9.1298539 | 9.1338391 |
| 46 | 13513.92 | 13639.03 | 100925.82 | 9.1307812 | 9.1347835 |
| 47 | 13542.74 | 13668.66 | 100929.83 | 9.1317064 | 9.1357260 |
| 48 | 13571.56 | 13698.29 | 100933.85 | 9.1326297 | 9.1366665 |
| 49 | 13600.38 | 13727.93 | 100937.88 | 9.1335509 | 9.1376051 |
| 50 | 13629.19 | 13757.57 | 100941.92 | 9.1344702 | 9.1385417 |
| 51 | 13658.01 | 13787.21 | 100945.96 | 9.1353875 | 9.1394764 |
| 52 | 13686.83 | 13816.85 | 100950.01 | 9.1363028 | 9.1404092 |
| 53 | 13715.64 | 13846.50 | 100954.07 | 9.1372161 | 9.1413400 |
| 54 | 13744.45 | 13876.15 | 100958.14 | 9.1381275 | 9.1422689 |
| 55 | 13773.27 | 13905.80 | 100962.22 | 9.1390370 | 9.1431959 |
| 56 | 13802.08 | 13935.45 | 100966.31 | 9.1399445 | 9.1441210 |
| 57 | 13830.89 | 13965.10 | 100970.41 | 9.1408501 | 9.1450442 |
| 58 | 13859.70 | 13994.76 | 100974.52 | 9.1417537 | 9.1459655 |
| 59 | 13888.50 | 14024.42 | 100978.64 | 9.1426555 | 9.1468850 |
| 60 | 13917.31 | 14054.08 | 100982.76 | 9.1435553 | 9.1478025 |

# 82 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tang |
|---|---|---|---|---|---|
| 30 | 99144.49 | 759575.41 | 766129.76 | 9.9962686 | 10.8805709 |
| 29 | 99140.69 | 757871.79 | 764440.75 | 9.9962519 | 10.8795957 |
| 28 | 99136.88 | 756175.67 | 762759.23 | 9.9962352 | 10.8786227 |
| 27 | 99133.06 | 754486.99 | 761085.16 | 9.9962185 | 10.8776518 |
| 26 | 99129.23 | 752805.71 | 759418.49 | 9.9962017 | 10.8766829 |
| 25 | 99125.39 | 751131.78 | 757759.16 | 9.9961849 | 10.8757161 |
| 24 | 99121.55 | 749465.14 | 756107.13 | 9.9961681 | 10.8747514 |
| 23 | 99117.70 | 747805.76 | 754462.36 | 9.9961512 | 10.8737888 |
| 22 | 99113.84 | 746153.57 | 752824.78 | 9.9961343 | 10.8728282 |
| 21 | 99109.97 | 744508.55 | 751194.37 | 9.9961174 | 10.8718697 |
| 20 | 99106.09 | 742870.64 | 749571.06 | 9.9961004 | 10.8709132 |
| 19 | 99102.21 | 741239.78 | 747974.82 | 9.9960834 | 10.8699587 |
| 18 | 99098.32 | 739615.95 | 746345.60 | 9.9960663 | 10.8690063 |
| 17 | 99094.42 | 737999.09 | 744743.35 | 9.9960492 | 10.8680558 |
| 16 | 99090.51 | 736389.16 | 743148.03 | 9.9960321 | 10.8671074 |
| 15 | 99086.59 | 734786.10 | 741559.59 | 9.9960149 | 10.8661609 |
| 14 | 99082.66 | 733189.89 | 739977.98 | 9.9959977 | 10.8652165 |
| 13 | 99078.72 | 731600.47 | 738403.18 | 9.9959804 | 10.8642740 |
| 12 | 99074.78 | 730017.80 | 736835.12 | 9.9959631 | 10.8633335 |
| 11 | 99070.83 | 728441.84 | 735273.77 | 9.9959458 | 10.8623949 |
| 10 | 99066.87 | 726872.55 | 733719.09 | 9.9959284 | 10.8614583 |
| 9 | 99062.90 | 725309.87 | 732171.02 | 9.9959111 | 10.8605236 |
| 8 | 99058.92 | 723753.78 | 730629.54 | 9.9958936 | 10.8595908 |
| 7 | 99054.93 | 722204.22 | 729094.60 | 9.9958761 | 10.8586600 |
| 6 | 99050.94 | 720661.16 | 727566.16 | 9.9958586 | 10.8577311 |
| 5 | 99046.94 | 719124.56 | 726044.17 | 9.9958411 | 10.8568041 |
| 4 | 99042.93 | 717594.37 | 724528.59 | 9.9958235 | 10.8558790 |
| 3 | 99038.91 | 716070.56 | 723019.40 | 9.9958059 | 10.8549558 |
| 2 | 99034.88 | 714553.08 | 721516.53 | 9.9957882 | 10.8540345 |
| 1 | 99030.84 | 713041.90 | 720019.96 | 9.9957705 | 10.8531150 |
| 0 | 99026.80 | 711536.97 | 718529.65 | 9.9957528 | 10.8521975 |

# 8 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 13917.31 | 14054.08 | 100982.76 | 9.1435553 | 9.1478025 |
| 1 | 13946.12 | 14083.74 | 100986.89 | 9.1444532 | 9.1487182 |
| 2 | 13974.92 | 14113.41 | 100991.03 | 9.1453493 | 9.1496321 |
| 3 | 14003.72 | 14143.08 | 100995.18 | 9.1462435 | 9.1505441 |
| 4 | 14032.52 | 14172.75 | 100999.34 | 9.1471358 | 9.1514543 |
| 5 | 14061.32 | 14202.43 | 101003.51 | 9.1480262 | 9.1523627 |
| 6 | 14090.12 | 14232.11 | 101007.69 | 9.1489148 | 9.1532692 |
| 7 | 14118.92 | 14261.79 | 101011.88 | 9.1498015 | 9.1541739 |
| 8 | 14147.72 | 14291.47 | 101016.07 | 9.1506864 | 9.1550769 |
| 9 | 14176.51 | 14321.15 | 101020.27 | 9.1515694 | 9.1559780 |
| 10 | 14205.31 | 14350.84 | 101024.48 | 9.1524507 | 9.1568773 |
| 11 | 14234.10 | 14380.53 | 101028.70 | 9.1533301 | 9.1577748 |
| 12 | 14262.89 | 14410.22 | 101032.93 | 9.1542076 | 9.1586706 |
| 13 | 14291.68 | 14439.91 | 101037.17 | 9.1550834 | 9.1595646 |
| 14 | 14320.47 | 14469.61 | 101041.42 | 9.1559574 | 9.1604569 |
| 15 | 14349.26 | 14499.31 | 101045.68 | 9.1568296 | 9.1613473 |
| 16 | 14378.05 | 14529.01 | 101049.95 | 9.1577000 | 9.1622361 |
| 17 | 14406.84 | 14558.71 | 101054.23 | 9.1585686 | 9.1631231 |
| 18 | 14435.62 | 14588.42 | 101058.51 | 9.1594354 | 9.1640083 |
| 19 | 14464.40 | 14618.13 | 101062.80 | 9.1603005 | 9.1648919 |
| 20 | 14493.19 | 14647.84 | 101067.10 | 9.1611639 | 9.1657737 |
| 21 | 14521.97 | 14677.55 | 101071.41 | 9.1620254 | 9.1666538 |
| 22 | 14550.75 | 14707.27 | 101075.73 | 9.1628853 | 9.1675322 |
| 23 | 14579.53 | 14736.99 | 101080.06 | 9.1637434 | 9.1684089 |
| 24 | 14608.30 | 14766.71 | 101084.40 | 9.1645998 | 9.1692839 |
| 25 | 14637.08 | 14796.44 | 101088.75 | 9.1654544 | 9.1701572 |
| 26 | 14665.85 | 14826.17 | 101093.11 | 9.1663074 | 9.1710289 |
| 27 | 14694.63 | 14855.90 | 101097.47 | 9 1671586 | 9.1718989 |
| 28 | 14723.40 | 14885.63 | 101101.84 | 9.1680081 | 9.1727672 |
| 29 | 14752.17 | 14915.36 | 101106.22 | 9.1688559 | 9.1736338 |
| 30 | 14780.94 | 14945.10 | 101110.61 | 9.1697021 | 9.1744988 |

# 81 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 99026.80 | 711536.97 | 718529.65 | 9.9957528 | 10.8521975 |
| 59 | 99022.75 | 710038.26 | 717045.56 | 9.9957350 | 10.8512818 |
| 58 | 99018.69 | 708545.73 | 715567.64 | 9.9957172 | 10.8503679 |
| 57 | 99014.62 | 707059.34 | 714095.87 | 9.9956993 | 10.8494559 |
| 56 | 99010.54 | 705579.05 | 712630.19 | 9.9956815 | 10.8485457 |
| 55 | 99006.45 | 704104.82 | 711170.58 | 9.9956635 | 10.8476373 |
| 54 | 99002.36 | 702636.62 | 709717.00 | 9.9956456 | 10.8467308 |
| 53 | 98998.26 | 701174.41 | 708269.41 | 9.9956276 | 10.8458261 |
| 52 | 98994.15 | 699718.06 | 706827.77 | 9.9956095 | 10.8449231 |
| 51 | 98990.03 | 698267.81 | 705392.05 | 9.9955915 | 10.8440220 |
| 50 | 98985.90 | 696823.35 | 703962.20 | 9.9955734 | 10.8431227 |
| 49 | 98981.76 | 695384.73 | 702538.20 | 9.9955552 | 10.8422252 |
| 48 | 98977.62 | 693951.92 | 701120.01 | 9.9955370 | 10.8413294 |
| 47 | 98973.47 | 693524.89 | 699707.60 | 9.9955188 | 10.8404354 |
| 46 | 98969.31 | 691103.59 | 698300.92 | 9.9955005 | 10.8395431 |
| 45 | 98965.14 | 689687.99 | 696899.94 | 9.9954822 | 10.8386527 |
| 44 | 98960.96 | 688278.07 | 695504.64 | 9.9954639 | 10.8377639 |
| 43 | 98956.77 | 686873.78 | 694114.96 | 9.9954455 | 10.8368769 |
| 42 | 98952.57 | 685475.08 | 692730.89 | 9.9954272 | 10.8359917 |
| 41 | 98948.37 | 684081.96 | 691352.39 | 9.9954087 | 10.8351081 |
| 40 | 98944.16 | 682694.37 | 689979.42 | 9.9953902 | 10.8342263 |
| 39 | 98939.94 | 681312.27 | 688611.95 | 9.9953717 | 10.8333462 |
| 38 | 98935.71 | 679935.65 | 687249.95 | 9.9953531 | 10.8324678 |
| 37 | 98931.47 | 678564.46 | 685893.38 | 9.9953345 | 10.8315911 |
| 36 | 98927.23 | 677198.67 | 684542.22 | 9.9953159 | 10.8307161 |
| 35 | 98922.98 | 675838.26 | 683196.42 | 9.9952972 | 10.8298428 |
| 34 | 98918.72 | 674483.19 | 681855.97 | 9.9952785 | 10.8289711 |
| 33 | 98914.45 | 673133.41 | 680520.82 | 9.9952597 | 10.8281011 |
| 32 | 98910.17 | 671788.91 | 679190.95 | 9.9952409 | 10.8272328 |
| 31 | 98905.88 | 670449.66 | 677866.32 | 9.9952221 | 10.8263662 |
| 30 | 98901.58 | 669115.62 | 676546.91 | 9.9952033 | 10.8255012 |

## 8 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 14780.94 | 14945.10 | 101110.61 | 9.1697021 | 9.1744988 |
| 31 | 14809.71 | 14974.84 | 101115.01 | 9.1705465 | 9.1753622 |
| 32 | 14838.48 | 15004.58 | 101119.42 | 9.1713893 | 9.1762239 |
| 33 | 14867.24 | 15034.33 | 101123.84 | 9.1722305 | 9.1770840 |
| 34 | 14896.01 | 15064.08 | 101128.27 | 9.1730699 | 9.1779425 |
| 35 | 14924.77 | 15093.83 | 101132.71 | 9.1739077 | 9.1787993 |
| 36 | 14953.53 | 15123.58 | 101137.15 | 9.1747439 | 9.1796546 |
| 37 | 14982.30 | 15153.33 | 101141.60 | 9.1755784 | 9.1805082 |
| 38 | 15011.06 | 15183.09 | 101146.06 | 9.1764112 | 9.1813602 |
| 39 | 15039.81 | 15212.85 | 101150.53 | 9.1772425 | 9.1822106 |
| 40 | 15068.57 | 15242.61 | 101155.01 | 9.1780721 | 9.1830595 |
| 41 | 15097.33 | 15272.38 | 101159.50 | 9.1789001 | 9.1839068 |
| 42 | 15126.08 | 15302.15 | 101164.00 | 9.1797265 | 9.1847525 |
| 43 | 15154.84 | 15331.92 | 101168.51 | 9.1805512 | 9.1855966 |
| 44 | 15183.59 | 15361.89 | 101173.03 | 9.1813744 | 9.1864392 |
| 45 | 15212.34 | 15391.47 | 101177.56 | 9.1821960 | 9.1872802 |
| 46 | 15241.09 | 15421.25 | 101182.09 | 9.1830160 | 9.1881196 |
| 47 | 15269.84 | 15451.03 | 101186.63 | 9.1838344 | 9.1889575 |
| 48 | 15298.58 | 15480.82 | 101191.18 | 9.1846512 | 9.1897939 |
| 49 | 15327.33 | 15510.61 | 101195.74 | 9.1854665 | 9.1906287 |
| 50 | 15356.07 | 15540.40 | 101200.31 | 9.1862802 | 9.1914621 |
| 51 | 15384.82 | 15570.19 | 101204.89 | 9.1870923 | 9.1922939 |
| 52 | 15413.56 | 15599.98 | 101209.48 | 9.1879029 | 9.1931241 |
| 53 | 15442.30 | 15629.78 | 101214.08 | 9.1887120 | 9.1939529 |
| 54 | 15471.04 | 15659.58 | 101218.69 | 9.1895195 | 9.1947802 |
| 55 | 15499.78 | 15689.38 | 101223.31 | 9.1903254 | 9.1956059 |
| 56 | 15528.51 | 15719.19 | 201227.93 | 9.1911299 | 9.1964302 |
| 57 | 15557.25 | 15749.00 | 101232.56 | 9.1919328 | 9.1972530 |
| 58 | 15585.98 | 15778.81 | 101237.20 | 9.1927342 | 9.1980743 |
| 59 | 15614.72 | 15808.62 | 101241.85 | 9.1935341 | 9.1988941 |
| 60 | 15643.45 | 15838.44 | 101246.51 | 9.1943324 | 9.1997125 |

| Minut. | 81 Grad. | | | | |
|---|---|---|---|---|---|
| | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
| 30 | 98901.58 | 669115.62 | 676546.91 | 9.9952033 | 10.8255012 |
| 29 | 98897.28 | 667786.77 | 675232.68 | 9.9951844 | 10.8246378 |
| 28 | 98892.97 | 666463.07 | 673923.60 | 9.9951654 | 10.8237761 |
| 27 | 98888.65 | 665144.49 | 672619.65 | 9.9951464 | 10.8229160 |
| 26 | 98884.32 | 663831.00 | 671320.79 | 9.9951274 | 10.8220575 |
| 25 | 98879.98 | 662522.58 | 670026.99 | 9.9951084 | 10.8212007 |
| 24 | 98875.63 | 661219.19 | 668738.22 | 9.9950893 | 10.8203454 |
| 23 | 98871.28 | 659920.80 | 667454.46 | 9.9950702 | 10.8194918 |
| 22 | 98866.92 | 658627.39 | 666175.68 | 9.9950510 | 10.8186398 |
| 21 | 98862.55 | 657338.92 | 664901.84 | 9.9950318 | 10.8177894 |
| 20 | 98858.17 | 656055.38 | 663632.93 | 9.9950126 | 10.8169405 |
| 19 | 98853.78 | 654776.72 | 662368.90 | 9.9949933 | 10.8160932 |
| 18 | 98849.38 | 653502.93 | 661109.73 | 9.9949740 | 10.8152475 |
| 17 | 98844.98 | 652233.96 | 659855.40 | 9.9949546 | 10.8144034 |
| 16 | 98840.57 | 650969.81 | 658605.87 | 9.9949352 | 10.8135608 |
| 15 | 98836.15 | 649710.43 | 657361.12 | 9.9949158 | 10.8127198 |
| 14 | 98831.72 | 648455.81 | 656121.13 | 9.9948964 | 10.8118804 |
| 13 | 98827.28 | 647205.91 | 654885.86 | 9.9948769 | 10.8110425 |
| 12 | 98822.83 | 645960.70 | 653655.28 | 9.9948573 | 10.8102061 |
| 11 | 98818.38 | 644720.17 | 652429.38 | 9.9948377 | 10.8093713 |
| 10 | 98813.92 | 643484.28 | 651208.12 | 9.9948181 | 10.8085379 |
| 9 | 98809.45 | 642253.01 | 649991.48 | 9.9947985 | 10.8077061 |
| 8 | 98804.97 | 641026.33 | 648779.44 | 9.9947788 | 10.8068759 |
| 7 | 98800.48 | 639804.22 | 647571.95 | 9.9947591 | 10.8060471 |
| 6 | 98795.98 | 638586.65 | 646369.01 | 9.9947393 | 10.8052198 |
| 5 | 98791.48 | 637373.59 | 645170.59 | 9.9947195 | 10.8043941 |
| 4 | 98786.97 | 636165.02 | 643976.66 | 9.9946997 | 10.8035698 |
| 3 | 98782.45 | 634960.92 | 642787.19 | 9.9946798 | 10.8027470 |
| 2 | 98777.92 | 633761.26 | 641602.16 | 9.9946599 | 10.8019257 |
| 1 | 98773.38 | 632566.01 | 640421.54 | 9.9946399 | 10.8011059 |
| 0 | 98768.83 | 631375.15 | 639245.32 | 9.9946199 | 10.8002875 |

# 9 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 15643.45 | 15838.44 | 101246.51 | 9.1943324 | 9.1997125 |
| 1 | 15672.18 | 15868.26 | 101251.18 | 9.1951293 | 9.2005294 |
| 2 | 15700.91 | 15898.08 | 101255.86 | 9.1959247 | 9.2013449 |
| 3 | 15729.63 | 15927.91 | 101260.55 | 9.1967186 | 9.2021588 |
| 4 | 15758.36 | 15957.74 | 101265.25 | 9.1975110 | 9.2029714 |
| 5 | 15787.08 | 15987.57 | 101269.96 | 9.1983019 | 9.2037825 |
| 6 | 15815.81 | 16017.40 | 101274.67 | 9.1990913 | 9.2045922 |
| 7 | 15844.53 | 16047.24 | 101279.39 | 9.1998793 | 9.2054004 |
| 8 | 15873.25 | 16077.08 | 101284.12 | 9.2006658 | 9.2062072 |
| 9 | 15901.97 | 16106.92 | 101288.86 | 9.2014509 | 9.2070126 |
| 10 | 15930.69 | 16136.77 | 101293.61 | 9.2022345 | 9.2078165 |
| 11 | 15959.40 | 16166.62 | 101298.37 | 9.2030167 | 9.2086191 |
| 12 | 15988.12 | 16196.47 | 101303.14 | 9.2037974 | 9.2094203 |
| 13 | 16016.83 | 16226.32 | 101307.92 | 9.2045766 | 9.2102200 |
| 14 | 16035.55 | 16256.17 | 101312.71 | 9.2053545 | 9.2110184 |
| 15 | 16074.26 | 16286.03 | 101317.51 | 9.2061309 | 9.2118153 |
| 16 | 16102.97 | 16315.89 | 101322.31 | 9.2069059 | 9.2126109 |
| 17 | 16131.67 | 16345.76 | 101327.12 | 9.2076795 | 9.2134051 |
| 18 | 16160.38 | 16375.63 | 101331.94 | 9.2084516 | 9.2141980 |
| 19 | 16189.09 | 16405.50 | 101336.77 | 9.2092224 | 9.2149894 |
| 20 | 16217.79 | 16435.37 | 101341.61 | 9.2099917 | 9.2157795 |
| 21 | 16246.50 | 16465.25 | 101346.46 | 9.2107597 | 9.2165683 |
| 22 | 16275.20 | 16495.13 | 101351.32 | 9.2115243 | 9.2173556 |
| 23 | 16303.90 | 16525.01 | 101356.19 | 9.2122914 | 9.2181417 |
| 24 | 16332.60 | 16554.89 | 101361.07 | 9.2130552 | 9.2189264 |
| 25 | 16361.29 | 16584.78 | 101365.95 | 9.2138176 | 9.2197097 |
| 26 | 16389.99 | 16614.67 | 101370.84 | 9.2145787 | 9.2204917 |
| 27 | 16418.68 | 16644.56 | 101375.74 | 9.2153384 | 9.2212724 |
| 28 | 16447.38 | 16674.46 | 101380.65 | 9.2160967 | 9.2220518 |
| 29 | 16476.07 | 16704.36 | 101385.57 | 9.2168536 | 9.2228298 |
| 30 | 16504.76 | 16734.26 | 101390.50 | 9.2176092 | 9.2236065 |

# 80 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 98768.83 | 631375.15 | 639245.32 | 9.9946199 | 10.8002875 |
| 59 | 98764.28 | 630188.66 | 638073.47 | 9.9945999 | 10.7994706 |
| 58 | 98759.72 | 629006.51 | 636905.95 | 9.9945798 | 10.7986551 |
| 57 | 98755.15 | 627828.58 | 635742.76 | 9.9945597 | 10.7978411 |
| 56 | 98750.57 | 626655.14 | 634583.86 | 9.9945396 | 10.7970286 |
| 55 | 98745.98 | 625485.88 | 633429.23 | 9.9945194 | 10.7962175 |
| 54 | 98741.38 | 624320.86 | 632278.84 | 9.9944992 | 10.7954078 |
| 53 | 98736.77 | 623160.07 | 631132.69 | 9.9944789 | 10.7945996 |
| 52 | 98732.16 | 622003.47 | 629990.73 | 9.9944587 | 10.7937928 |
| 51 | 68727.54 | 620851.06 | 628852.95 | 9.9944383 | 10.7929874 |
| 50 | 98722.91 | 619702.79 | 627719.33 | 9.9944180 | 10.7921835 |
| 49 | 98718.27 | 618558.67 | 626589.84 | 9.9943975 | 10.7913809 |
| 48 | 98713.62 | 617418.65 | 625464.46 | 9.9943771 | 10.7905797 |
| 47 | 98708.97 | 616282.72 | 624343.16 | 9.9543566 | 10.7897800 |
| 46 | 98704.31 | 615150.85 | 623225.94 | 9.9943361 | 10.7889816 |
| 45 | 98699.64 | 614023.03 | 622112.75 | 9.9943156 | 10.7881847 |
| 44 | 98694.96 | 612899.23 | 621003.59 | 9.9942950 | 10.7873891 |
| 43 | 98690.27 | 611779.43 | 619898.43 | 9.9942743 | 10.7865949 |
| 42 | 98685.57 | 610663.60 | 618797.25 | 9.9942537 | 10.7858020 |
| 41 | 98680.86 | 609551.74 | 617700.03 | 9.9942330 | 10.7850106 |
| 40 | 98676.15 | 608443.81 | 616606.74 | 9.9942122 | 10.7842205 |
| 39 | 98671.43 | 607339.79 | 615517.36 | 9.9941914 | 10.7834317 |
| 38 | 98666.70 | 606239.67 | 614431.89 | 9.9941706 | 10.7826444 |
| 37 | 98661.96 | 605143.43 | 613350.28 | 9.9941498 | 10.7818583 |
| 36 | 98657.21 | 604051.03 | 612272.53 | 9.9941289 | 10.7810736 |
| 35 | 98652.46 | 602962.47 | 611198.61 | 9.9941079 | 10.7802903 |
| 34 | 98647.70 | 601877.72 | 610128.50 | 9.9940870 | 10.7795083 |
| 33 | 98642.93 | 600796.76 | 609062.19 | 9.9940659 | 10.7787276 |
| 32 | 98638.15 | 599719.57 | 607999.64 | 9.9940449 | 10.7779482 |
| 31 | 98633.36 | 598646.14 | 606940.85 | 9.9940238 | 10.7771702 |
| 30 | 98628.56 | 597576.44 | 605885.80 | 9.9940027 | 10.7763935 |

# 9 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 16504.76 | 16734.26 | 101390.50 | 9.2176092 | 9.2236065 |
| 31 | 16533.45 | 16764.16 | 101395.44 | 9.2183635 | 9.2243819 |
| 32 | 16562.14 | 16794.07 | 101400.39 | 9.2191164 | 9.2251561 |
| 33 | 16590.82 | 16823.98 | 101405.35 | 9.2198680 | 9.2259289 |
| 34 | 16619.51 | 16853.89 | 101410.32 | 9.2206182 | 9.2267004 |
| 35 | 16648.19 | 16883.81 | 101415.30 | 9.2213671 | 9.2274706 |
| 36 | 16676.87 | 16913.73 | 101420.29 | 9.2221147 | 9.2282395 |
| 37 | 16705.55 | 16943.65 | 101425.29 | 9.2228609 | 9.2290071 |
| 38 | 16734.23 | 16973.58 | 101430.29 | 9.2236059 | 9.2297735 |
| 39 | 16762.91 | 17003.51 | 101435.30 | 9.2243495 | 9.2305386 |
| 40 | 16791.59 | 17033.44 | 101440.32 | 9.2250918 | 9.2313024 |
| 41 | 16820.26 | 17063.37 | 101445.35 | 9.2258328 | 9.2320650 |
| 42 | 16848.94 | 17093.31 | 101450.39 | 9.2265725 | 9.2328262 |
| 43 | 16877.61 | 17123.25 | 101455.44 | 9.2273110 | 9.2335863 |
| 44 | 16906.28 | 17153.19 | 101460.50 | 9.2280481 | 9.2343451 |
| 45 | 16934.95 | 17183.14 | 101465.57 | 9.2287839 | 9.2351026 |
| 46 | 16963.62 | 17213.09 | 101470.64 | 9.2295185 | 9.2358589 |
| 47 | 16992.28 | 17243.04 | 101475.72 | 9.2302518 | 9.2366139 |
| 48 | 17020.95 | 17273.00 | 101480.81 | 9.2309838 | 9.2373678 |
| 49 | 17049.61 | 17302.96 | 101485.91 | 9.2317145 | 9.2381203 |
| 50 | 17078.28 | 17332.92 | 101491.02 | 9.2324440 | 9.2388717 |
| 51 | 17106.94 | 17362.88 | 101496.14 | 9.2331722 | 9.2396218 |
| 52 | 17135.60 | 17392.85 | 101501.27 | 9.2338992 | 9.2403708 |
| 53 | 17164.25 | 17422.82 | 101506.41 | 9.2346249 | 9.2411185 |
| 54 | 17192.91 | 17452.79 | 101511.56 | 9.2353494 | 9.2418650 |
| 55 | 17221.56 | 17482.77 | 101516.72 | 9.2360726 | 9.2426103 |
| 56 | 17250.22 | 17512.75 | 101521.89 | 9.2367946 | 9.2433543 |
| 57 | 17278.87 | 17542.73 | 101527.07 | 9.2375153 | 9.2440972 |
| 58 | 17307.52 | 17572.72 | 101532.26 | 9.2382349 | 9.2448389 |
| 59 | 17336.17 | 17602.71 | 101537.46 | 9.2389532 | 9.2455794 |
| 60 | 17364.82 | 17632.70 | 101542.67 | 9.2396702 | 9.2463188 |

| Minut. | 80 Grad. | | | | |
|---|---|---|---|---|---|
| | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan.* |
| 30 | 98628.56 | 597576.44 | 605885.80 | 9.9940027 | 10.7763935 |
| 29 | 98623.75 | 596510.45 | 604834.45 | 9.9939815 | 10.7756181 |
| 28 | 98618.94 | 595448.15 | 603786.80 | 9.9939603 | 10.7748439 |
| 27 | 98614.12 | 594389.52 | 602742.82 | 9.9939391 | 10.7740711 |
| 26 | 98609.29 | 593334.55 | 601702.50 | 9.9939178 | 10.7732996 |
| 25 | 98604.45 | 592283.22 | 600665.81 | 9.9938965 | 10.7725294 |
| 24 | 98599.60 | 591235.50 | 599632.74 | 9.9938752 | 10.7717605 |
| 23 | 98594.74 | 590191.38 | 598603.26 | 9.9938538 | 10.7709929 |
| 22 | 98589.88 | 589150.84 | 597577.37 | 9.9938324 | 10.7702265 |
| 21 | 98585.01 | 588113.86 | 596555.04 | 9.9938109 | 10.7694614 |
| 20 | 98580.13 | 587080.42 | 595536.25 | 9.9937894 | 10.7686976 |
| 19 | 98575.24 | 586050.51 | 594520.98 | 9.9937679 | 10.7679350 |
| 18 | 98570.34 | 585024.10 | 593509.22 | 9.9937463 | 10.7671738 |
| 17 | 98565.44 | 584001.17 | 592500.95 | 9.9937247 | 10.7664137 |
| 16 | 98560.53 | 582981.72 | 591496.14 | 9.9937030 | 10.7656549 |
| 15 | 98555.61 | 581965.72 | 590494.79 | 9.9936813 | 10.7648974 |
| 14 | 98550.68 | 580953.15 | 589496.88 | 9.9936596 | 10.7641411 |
| 13 | 98545.74 | 579944.00 | 588502.38 | 9.9936378 | 10.7633861 |
| 12 | 98540.79 | 578938.25 | 587511.28 | 9.9936160 | 10.7626322 |
| 11 | 98535.83 | 577935.88 | 586523.56 | 9.9935942 | 10.7618797 |
| 10 | 98530.87 | 576936.88 | 585539.20 | 9.9935723 | 10.7611283 |
| 9 | 98525.90 | 575941.22 | 584558.20 | 9.9935504 | 10.7603782 |
| 8 | 98520.92 | 574948.89 | 583580.53 | 9.9935285 | 10.7596292 |
| 7 | 98515.93 | 573959.88 | 582606.17 | 9.9935065 | 10.7588815 |
| 6 | 98510.93 | 572974.16 | 581635.10 | 9.9934844 | 10.7581350 |
| 5 | 98505.92 | 571991.73 | 580667.32 | 9.9934624 | 10.7573897 |
| 4 | 98500.91 | 571012.56 | 579702.80 | 9.9934403 | 10.7566457 |
| 3 | 98495.89 | 570036.63 | 578741.53 | 9.9934181 | 10.7559028 |
| 2 | 98490.86 | 569063.94 | 577783.50 | 9.9933959 | 10.7551611 |
| 1 | 98485.82 | 568094.46 | 576828.67 | 9.9933737 | 10.7544206 |
| 0 | 98480.77 | 567128.18 | 575877.05 | 9.9933515 | 10.7536812 |

## 10 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 17364.82 | 17632.70 | 101542.67 | 9.2396702 | 9.2463188 |
| 1 | 17393.46 | 17662.69 | 101547.88 | 9.2403861 | 9.2470569 |
| 2 | 17422.11 | 17692.69 | 101553.10 | 9.2411007 | 9.2477939 |
| 3 | 17450.75 | 17722.69 | 101558.33 | 9.2418141 | 9.2485297 |
| 4 | 17479.39 | 17752.69 | 101563.57 | 9.2425264 | 9.2492643 |
| 5 | 17508.03 | 17782.70 | 101568.82 | 9.2432374 | 9.2499978 |
| 6 | 17536.67 | 17812.71 | 101574.08 | 9.2439472 | 9.2507301 |
| 7 | 17565.31 | 17842.72 | 101579.35 | 9.2446558 | 9.2514612 |
| 8 | 17593.95 | 17872.74 | 101584.63 | 9.2453632 | 9.2521912 |
| 9 | 17622.58 | 17902.76 | 101589.92 | 9.2460695 | 9.2529200 |
| 10 | 17651.21 | 17932.78 | 101595.21 | 9.2467746 | 9.2536477 |
| 11 | 17679.84 | 17962.81 | 101600.51 | 9.2474784 | 9.2543743 |
| 12 | 17708.47 | 17992.84 | 101605.82 | 9.2481811 | 9.2550997 |
| 13 | 17737.10 | 18022.87 | 101611.14 | 9.2488827 | 9.2558240 |
| 14 | 17765.73 | 18052.91 | 101616.47 | 9.2495830 | 9.2565472 |
| 15 | 17794.35 | 18082.95 | 101621.81 | 9.2502822 | 9.2572691 |
| 16 | 17822.98 | 18112.99 | 101627.16 | 9.2509803 | 9.2579901 |
| 17 | 17851.60 | 18143.03 | 101632.52 | 9.2516772 | 9.2587099 |
| 18 | 17880.22 | 18173.08 | 101637.89 | 9.2523729 | 9.2594285 |
| 19 | 17908.84 | 18203.13 | 101643.27 | 9.2530675 | 9.2601461 |
| 20 | 17937.46 | 18233.18 | 101648.66 | 9.2537609 | 9.2608625 |
| 21 | 17966.07 | 18263.24 | 101654.06 | 9.2544532 | 9.2615779 |
| 22 | 17994.69 | 18293.30 | 101659.46 | 9.2551444 | 9.2622921 |
| 23 | 18023.30 | 18323.36 | 101664.87 | 9.2558344 | 9.2630053 |
| 24 | 18051.91 | 18353.43 | 101670.29 | 9.2565233 | 9.2637173 |
| 25 | 18080.52 | 18383.50 | 101675.72 | 9.2572110 | 9.2644283 |
| 26 | 18109.13 | 18413.57 | 101681.16 | 9.2578977 | 9.2651382 |
| 27 | 18137.74 | 18443.65 | 101686.61 | 9.2585832 | 9.2658470 |
| 28 | 18166.35 | 18473.73 | 101692.07 | 9.2592676 | 9.2665547 |
| 29 | 18194.95 | 18503.81 | 101697.54 | 9.2599509 | 9.2672613 |
| 30 | 18223.55 | 18533.90 | 101703.02 | 9.2606330 | 9.2679669 |

# 79 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 98480.77 | 567128.18 | 575877.05 | 9.9933515 | 10.7536812 |
| 59 | 98475.71 | 566165.09 | 574928.61 | 9.9933292 | 10.7529431 |
| 58 | 98470.65 | 565205.16 | 573983.33 | 9.9933068 | 10.7522061 |
| 57 | 98465.58 | 564248.38 | 573041.21 | 9.9932845 | 10.7514703 |
| 56 | 98460.50 | 563294.74 | 572102.23 | 9.9932621 | 10.7507357 |
| 55 | 98455.41 | 562344.21 | 571166.36 | 9.9932396 | 10.7500022 |
| 54 | 98450.31 | 561396.80 | 570233.60 | 9.9932171 | 10.7492699 |
| 53 | 98445.21 | 560452.47 | 569303.93 | 9.9931946 | 10.7485388 |
| 52 | 98440.10 | 559511.21 | 568377.34 | 9.9931720 | 10.7478088 |
| 51 | 98434.98 | 558573.02 | 567453.80 | 9.9931494 | 10.7470800 |
| 50 | 98429.85 | 557637.86 | 566533.31 | 9.9931268 | 10.7463523 |
| 49 | 98424.71 | 556705.74 | 565615.84 | 9.9931041 | 10.7456257 |
| 48 | 98419.56 | 555776.63 | 564701.40 | 9.9930814 | 10.7449003 |
| 47 | 98414.40 | 554850.52 | 563789.95 | 9.9930587 | 10.7441760 |
| 46 | 98409.24 | 553927.40 | 562881.48 | 9.9930355 | 10.7434528 |
| 45 | 98404.07 | 553007.24 | 561975.99 | 9.9930131 | 10.7427308 |
| 44 | 98398.89 | 552090.05 | 561073.45 | 9.9929902 | 10.7420099 |
| 43 | 98393.70 | 551175.79 | 560173.86 | 9.9929673 | 10.7412901 |
| 42 | 98388.50 | 550264.46 | 559277.19 | 9.9929444 | 10.7405715 |
| 41 | 98383.29 | 549356.04 | 558383.43 | 9.9929214 | 10.7398539 |
| 40 | 98378.08 | 548450.52 | 557492.58 | 9.9928984 | 10.7391375 |
| 39 | 98372.86 | 547547.88 | 556604.60 | 9.9928753 | 10.7384221 |
| 38 | 98367.63 | 546648.12 | 555719.50 | 9.9928522 | 10.7377079 |
| 37 | 98362.39 | 545751.21 | 554837.26 | 9.9928291 | 10.7369947 |
| 36 | 98357.14 | 544857.15 | 553957.86 | 9.9928059 | 10.7362827 |
| 35 | 88351.89 | 543965.92 | 553081.29 | 9.9927827 | 10.7355717 |
| 34 | 98346.63 | 543077.50 | 552207.54 | 9.9927595 | 10.7348618 |
| 33 | 98341.36 | 542191.88 | 551336.59 | 9.9927362 | 10.7341530 |
| 32 | 98336.08 | 541309.06 | 550468.43 | 9.9927129 | 10.7334453 |
| 31 | 98330.79 | 540429.01 | 549603.05 | 9.9926895 | 10.7327387 |
| 30 | 98325.49 | 539551.72 | 548740.43 | 9.9926661 | 10.7320331 |

# 10 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 18223.55 | 18533.90 | 101703.02 | 9.2606330 | 9.2679669 |
| 31 | 18252.15 | 18563.99 | 101708.51 | 9.2613141 | 9.2686714 |
| 32 | 19280.75 | 18594.08 | 101714.01 | 9.2619941 | 9.2693749 |
| 33 | 18309.35 | 18624.18 | 101719.52 | 9.2626729 | 9.2700772 |
| 34 | 18337.95 | 18654.28 | 101725.04 | 9.2633507 | 9.2707786 |
| 35 | 18366.54 | 18684.38 | 101730.56 | 9.2640274 | 9.2714788 |
| 36 | 18395.13 | 18714.49 | 101736.09 | 9.2647030 | 9.2721780 |
| 37 | 18423.73 | 18744.60 | 101741.63 | 9.2653775 | 9.2728762 |
| 38 | 18452.32 | 18774.71 | 101747.18 | 9.2660509 | 9.2735733 |
| 39 | 18480.91 | 18804.83 | 101752.74 | 9.2667232 | 9.2742694 |
| 40 | 18509.49 | 18834.95 | 101758.31 | 9.2673945 | 9.2749644 |
| 41 | 18538.08 | 18865.07 | 101763.89 | 9.2680647 | 9.2756584 |
| 42 | 58566.66 | 18895.20 | 101769.48 | 9.2687338 | 9.2763514 |
| 43 | 18595.24 | 18925.33 | 101775.08 | 9.2694019 | 9.2770434 |
| 44 | 18623.82 | 18955.46 | 101780.69 | 9.2700689 | 9.2777343 |
| 45 | 18652.40 | 18985.59 | 101786.31 | 9.2707348 | 9.2784242 |
| 46 | 18680.98 | 19015.73 | 101791.94 | 9.2713997 | 9.2791131 |
| 47 | 18709.56 | 19045.87 | 101797.58 | 9.2720635 | 9.2798009 |
| 48 | 18738.13 | 19076.02 | 101803.22 | 9.2727263 | 9.2804878 |
| 49 | 18766.70 | 19106.17 | 101808.87 | 9.2733880 | 9.2811736 |
| 50 | 18795.27 | 19136.32 | 101814.53 | 9.2740487 | 9.2818585 |
| 51 | 18823.84 | 19166.48 | 101820.20 | 9.2747083 | 9.2825423 |
| 52 | 18852.41 | 19196.64 | 101825.88 | 9.2753669 | 9.2832251 |
| 53 | 18880.98 | 19226.80 | 101831.57 | 9.2760245 | 9.2839070 |
| 54 | 18909.54 | 19256.96 | 101837.27 | 9.2766811 | 9.2845878 |
| 55 | 18938.11 | 19287.13 | 101842.98 | 9.2773366 | 9.2852677 |
| 56 | 18966.67 | 19317.30 | 101848.70 | 9.2779911 | 9.2859466 |
| 57 | 18995.23 | 19347.48 | 101854.43 | 9.2786445 | 9.2866245 |
| 58 | 19023.79 | 19377.66 | 101860.17 | 9.2792970 | 9.2873014 |
| 59 | 19052.34 | 19407.84 | 101865.92 | 9.2799484 | 9.2879773 |
| 60 | 19080.90 | 19438.03 | 101871.68 | 9.2805988 | 9.2886523 |

# 79 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 98325.49 | 539551.72 | 548740.43 | 9.9926661 | 10.7320331 |
| 29 | 98320.18 | 538677.18 | 547880.55 | 9.9926427 | 10.7313286 |
| 28 | 98314.87 | 537805.38 | 547023.42 | 9.9926192 | 10.7306251 |
| 27 | 98309.55 | 536936.30 | 546169.01 | 9.9925957 | 10.7299228 |
| 26 | 98304.22 | 536069.93 | 545317.31 | 9.9925722 | 10.7292214 |
| 25 | 98298.88 | 535206.26 | 544468.31 | 9.9925486 | 10.7285212 |
| 24 | 98293.53 | 534345.27 | 543621.99 | 9.9925250 | 10.7278220 |
| 23 | 98288.17 | 533486.96 | 542778.35 | 9.9925013 | 10.7271238 |
| 22 | 98282.81 | 532631.31 | 541937.37 | 9.9924776 | 10.7264267 |
| 21 | 98277.44 | 531778.30 | 541099.03 | 9.9924539 | 10.7257306 |
| 20 | 98272.06 | 530927.93 | 540263.33 | 9.9924301 | 10.7250356 |
| 19 | 98266.67 | 530080.18 | 539430.26 | 9.9924063 | 10.7243416 |
| 18 | 98261.27 | 529235.05 | 538599.79 | 9.9923824 | 10.7236486 |
| 17 | 98255.87 | 528392.51 | 537771.92 | 9.9923585 | 10.7229566 |
| 16 | 98250.46 | 527552.55 | 536946.64 | 9.9923346 | 10.7222657 |
| 15 | 98245.04 | 526715.17 | 536123.93 | 9.9923106 | 10.7215758 |
| 14 | 98239.61 | 525880.35 | 535303.79 | 9.9922866 | 10.7208869 |
| 13 | 98234.17 | 525048.09 | 534486.20 | 9.9922626 | 10.7201991 |
| 12 | 98228.72 | 524218.36 | 533671.14 | 9.9922385 | 10.7195122 |
| 11 | 98223.27 | 523391.16 | 532858.61 | 9.9922144 | 10.7188264 |
| 10 | 98217.81 | 522566.47 | 532048.60 | 9.9921902 | 10.7181415 |
| 9 | 98212.34 | 521744.28 | 531241.09 | 9.9921660 | 10.7174577 |
| 8 | 98206.86 | 520924.59 | 530436.08 | 9.9921418 | 10.7167749 |
| 7 | 98201.37 | 520107.38 | 529633.54 | 9.9921175 | 10.7160930 |
| 6 | 98195.87 | 519292.64 | 528833.47 | 9.9920932 | 10.7154122 |
| 5 | 98190.36 | 518480.35 | 528035.87 | 9.9920689 | 10.7147323 |
| 4 | 98184.85 | 517670.51 | 527240.70 | 9.9920445 | 10.7140534 |
| 3 | 98179.33 | 516863.11 | 526447.98 | 9.9920201 | 10.7133755 |
| 2 | 98173.80 | 516058.13 | 525657.68 | 9.9919956 | 10.7126986 |
| 1 | 98168.26 | 515255.57 | 524869.79 | 9.9919711 | 10.7120227 |
| 0 | 98162.71 | 514455.40 | 524084.31 | 9.9919466 | 10.7113477 |

# 11 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 19080.90 | 19438.03 | 101871.68 | 9.2805988 | 9.2886523 |
| 1 | 19109.45 | 19468.22 | 101877.44 | 9.2812483 | 9.2893263 |
| 2 | 19138.00 | 19498.41 | 101883.21 | 9.2818967 | 9.2899993 |
| 3 | 19166.55 | 19528.61 | 101888.99 | 9.2825441 | 9.2906713 |
| 4 | 19195.16 | 19558.81 | 101894.78 | 9.2831905 | 9.2913424 |
| 5 | 19223.65 | 19589.01 | 101900.58 | 9.2838359 | 9.2920126 |
| 6 | 19252.20 | 19619.22 | 101906.39 | 9.2844803 | 9.2926817 |
| 7 | 19280.74 | 19649.43 | 101912.21 | 9.2851237 | 9.2933500 |
| 8 | 19309.28 | 19679.64 | 101918.04 | 9.2857661 | 9.2940172 |
| 9 | 19337.82 | 19709.86 | 101923.88 | 9.2864076 | 9.2946836 |
| 10 | 19366.36 | 19740.08 | 101929.73 | 9.2870480 | 9.2953489 |
| 11 | 19394.90 | 19770.30 | 101935.59 | 9.2876875 | 9.2960134 |
| 12 | 19423.44 | 19800.53 | 101941.46 | 9.2883260 | 9.2966769 |
| 13 | 19451.97 | 19830.76 | 101947.34 | 9.2889636 | 9.2973395 |
| 14 | 19480.50 | 19861.00 | 101953.23 | 9.2896001 | 9.2980011 |
| 15 | 19509.03 | 19891.24 | 101959.12 | 9.2902357 | 9.2986618 |
| 16 | 19537.56 | 19921.48 | 101965.02 | 9.2908704 | 9.2993216 |
| 17 | 19566.09 | 19951.72 | 101970.93 | 9.2915040 | 9.2999804 |
| 18 | 19594.61 | 19981.97 | 101976.85 | 9.2921367 | 9.3006383 |
| 19 | 19623.14 | 20012.22 | 101982.78 | 9.2927685 | 9.3012954 |
| 20 | 19651.66 | 20042.48 | 101988.72 | 9.2933993 | 9.3019514 |
| 21 | 19680.18 | 20072.74 | 101994.67 | 9.2940291 | 9.3026066 |
| 22 | 19708.70 | 20103.00 | 102000.63 | 9.2946580 | 9.3032609 |
| 23 | 19737.22 | 20133.27 | 102006.60 | 9.2952859 | 9.3039143 |
| 24 | 19765.73 | 20163.54 | 102012.58 | 9.2959129 | 9.3045667 |
| 25 | 19794.25 | 20193.81 | 102018.57 | 9.2965390 | 9.3052183 |
| 26 | 19822.76 | 20224.09 | 102024.57 | 9.2971641 | 9.3058689 |
| 27 | 19851.27 | 20254.37 | 102030.58 | 9.2977883 | 9.3065187 |
| 28 | 19879.78 | 20284.65 | 102036.60 | 9.2984116 | 9.3071674 |
| 29 | 19908.29 | 20314.94 | 102042.63 | 9.2990339 | 9.3078155 |
| 30 | 19936.79 | 20345.23 | 102048.67 | 9.2996553 | 9.3084626 |

# 78 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 98162.71 | 514455.40 | 524084.31 | 9.9919466 | 10.7113477 |
| 59 | 98157.16 | 513657.63 | 523301.21 | 9.9919220 | 10.7106737 |
| 58 | 98151.60 | 512862.24 | 522520.50 | 9.9918974 | 10.7100007 |
| 57 | 98146.03 | 512069.21 | 521742.16 | 9.9918727 | 10.7093287 |
| 56 | 98140.45 | 511278.55 | 520966.18 | 9.9918480 | 10.7086576 |
| 55 | 98134.86 | 510490.24 | 520192.54 | 9.9918233 | 10.7079874 |
| 54 | 98129.26 | 509704.26 | 519421.25 | 9.9917986 | 10.7073183 |
| 53 | 98123.66 | 508920.61 | 518652.28 | 9.9917737 | 10.7066500 |
| 52 | 98118.05 | 508139.28 | 517885.63 | 9.9917489 | 10.7059828 |
| 51 | 98112.43 | 507360.25 | 517121.28 | 9.9917240 | 10.7053164 |
| 50 | 98106.80 | 506583.52 | 516359.24 | 9.9916991 | 10.7046511 |
| 49 | 98101.16 | 505809.07 | 515599.48 | 9.9916741 | 10.7039866 |
| 48 | 98095.51 | 505036.90 | 514841.99 | 9.9916492 | 10.7033231 |
| 47 | 98089.86 | 504267.00 | 514086.77 | 9.9916241 | 10.7026605 |
| 46 | 98084.20 | 503499.35 | 513333.81 | 9.9915990 | 10.7019989 |
| 45 | 98078.53 | 502733.95 | 512583.09 | 9.9915739 | 10.7013382 |
| 44 | 98072.85 | 501970.78 | 511834.61 | 9.9915488 | 10.7006784 |
| 43 | 98067.16 | 501209.84 | 511088.35 | 9.9915236 | 10.7000196 |
| 42 | 98061.46 | 500451.11 | 510344.31 | 9.9914984 | 10.6993617 |
| 41 | 98055.76 | 499694.59 | 509602.48 | 9.9914731 | 10.6987046 |
| 40 | 98050.05 | 498940.27 | 508862.84 | 9.9914478 | 10.6980486 |
| 39 | 98044.33 | 498188.13 | 508125.39 | 9.9914225 | 10.6973934 |
| 38 | 98038.60 | 497438.17 | 507390.12 | 9.9913971 | 10.6967391 |
| 37 | 98032.86 | 496690.37 | 506657.01 | 9.9913717 | 10.6960857 |
| 36 | 98027.11 | 495944.74 | 505926.06 | 9.9913462 | 10.6954333 |
| 35 | 98021.36 | 495201.25 | 505197.26 | 9.9913207 | 10.6947817 |
| 34 | 98015.60 | 494459.90 | 504470.60 | 9.9912952 | 10.6941311 |
| 33 | 98009.83 | 493720.68 | 503746.07 | 9.9912696 | 10.6934813 |
| 32 | 98004.05 | 492983.58 | 503023.67 | 9.9912440 | 10.6928325 |
| 31 | 97998.26 | 492248.59 | 502303.37 | 9.9912184 | 10.6921845 |
| 30 | 97992.47 | 491515.70 | 501585.17 | 9.9911927 | 10.6915374 |

# 11 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 19936.79 | 20345.23 | 102048.67 | 9.2996553 | 9.3084626 |
| 31 | 19965.30 | 20375.52 | 102054.71 | 9.3002758 | 9.3091088 |
| 32 | 19993.80 | 20405.82 | 102060.76 | 9.3008953 | 9.3097541 |
| 33 | 20022.30 | 20436.12 | 102066.82 | 9.3015140 | 9.3103985 |
| 34 | 20050.80 | 20466.43 | 102072.89 | 9.3021317 | 9.3110421 |
| 35 | 20079.30 | 20496.74 | 102078.97 | 9.3027485 | 9.3116848 |
| 36 | 20107.79 | 20527.05 | 102085.06 | 9.3033644 | 9.3123266 |
| 37 | 20136.29 | 20557.37 | 102091.16 | 9.3039794 | 9.3129675 |
| 38 | 20164.78 | 20587.69 | 102097.27 | 9.3945934 | 9.3136076 |
| 39 | 20193.27 | 20618.01 | 102103.39 | 9.3052066 | 9.3142468. |
| 40 | 20221.76 | 20648.34 | 102109.52 | 9.3058189 | 9.3148851 |
| 41 | 20250.24 | 20678.67 | 102115.66 | 9.3064303 | 9.3155226 |
| 42 | 20278.73 | 20709.00 | 102121.81 | 9.3070407 | 8.3161592 |
| 43 | 20307.21 | 20739.34 | 102127.97 | 9.3076503 | 9.3167950 |
| 44 | 20335.69 | 20769.68 | 102134.14 | 9.3082590 | 9.3174299 |
| 45 | 20364.17 | 20800.03 | 102140.32 | 9.3088668 | 9.3180640 |
| 46 | 20392.65 | 20830.38 | 102146.50 | 9.3094737 | 9.3186972 |
| 47 | 20421.13 | 20860.73 | 102152.69 | 9.3100798 | 9.3193295 |
| 48 | 20449.61 | 20891.09 | 102158.89 | 9.3106849 | 9.3199611 |
| 49 | 20478.08 | 20921.45 | 102165.10 | 9.3112892 | 9.3205918 |
| 50 | 20506.55 | 20951.81 | 102171.32 | 9.3118926 | 9.3212216 |
| 51 | 20535.02 | 20982.18 | 102177.55 | 9.3124951 | 9.3218506 |
| 52 | 20563.49 | 21012.55 | 102183.79 | 9.3130968 | 9.3224788 |
| 53 | 20591.95 | 21042.93 | 102190.04 | 9.3136976 | 9.3231061 |
| 54 | 20620.42 | 21073.31 | 102196.30 | 9.3142975 | 9.3237327 |
| 55 | 20648.88 | 21103.69 | 102202.57 | 9.3148965 | 9.3243584 |
| 56 | 20677.34 | 21134.07 | 102208.85 | 9.3154947 | 9.3249832 |
| 57 | 20705.80 | 21164.46 | 102215.14 | 9.3160921 | 9.3256073 |
| 58 | 20734.26 | 21194.85 | 102221.44 | 9.3166885 | 9.3262305 |
| 59 | 20762.71 | 21225.25 | 102227.75 | 9.3172841 | 9.3268529 |
| 60 | 20791.17 | 21255.65 | 102234.07 | 9.3178789 | 9.3274745 |

# 78 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 97992.47 | 491515.70 | 501585.17 | 9.9911927 | 10.6915374 |
| 29 | 97986.67 | 490784.91 | 500869.07 | 9.9911670 | 10.6908912 |
| 28 | 97980.86 | 490056.20 | 500155.05 | 9.9911412 | 10.6902459 |
| 27 | 97975.04 | 489329.56 | 499443.11 | 9.9911154 | 10.6896015 |
| 26 | 97969.21 | 488604.99 | 498733.23 | 9.9910896 | 10.6889579 |
| 25 | 97963.37 | 487882.48 | 498025.41 | 9.9910637 | 10.6883152 |
| 24 | 97957.52 | 487162.01 | 497319.64 | 9.9910378 | 10.6876734 |
| 23 | 97951.67 | 486443.59 | 496615.91 | 9.9910119 | 10.6870325 |
| 22 | 97945.81 | 485727.19 | 495914.21 | 9.9909859 | 10.6863924 |
| 21 | 97939.94 | 485012.82 | 495214.53 | 9.9909598 | 10.6857532 |
| 20 | 97934.06 | 484300.45 | 494516.87 | 9.9909338 | 10.6851149 |
| 19 | 97928.17 | 483590.10 | 493821.20 | 9.9909077 | 10.6844774 |
| 18 | 97922.28 | 482881.74 | 493127.54 | 9.9908815 | 10.6838408 |
| 17 | 97916.38 | 482175.36 | 492435.86 | 9.9908553 | 10.6832050 |
| 16 | 97910.47 | 481470.96 | 491746.16 | 9.9908291 | 10.6825701 |
| 15 | 97904.55 | 480768.54 | 491058.44 | 9.9908029 | 10.6819360 |
| 14 | 97898.62 | 480068.08 | 490372.67 | 9.9907766 | 10.6813028 |
| 13 | 97892.68 | 479369.57 | 489688.86 | 9.9907502 | 10.6806705 |
| 12 | 97886.74 | 478673.00 | 489007.00 | 9.9907239 | 10.6800389 |
| 11 | 97880.79 | 477978.37 | 488327.07 | 9.9906974 | 10.6794082 |
| 10 | 97874.83 | 477285.67 | 487649.07 | 9.9906710 | 10.6787784 |
| 9 | 97868.86 | 476594.90 | 486972.99 | 9.9906445 | 10.6781494 |
| 8 | 97862.88 | 475906.03 | 486298.83 | 9.9906180 | 10.6775212 |
| 7 | 97856.89 | 475219.07 | 485626.57 | 9.9905914 | 10.6768939 |
| 6 | 97850.90 | 474534.01 | 484956.21 | 9.9905648 | 10.6762673 |
| 5 | 97844.90 | 473850.83 | 484287.74 | 9.9905382 | 10.6756416 |
| 4 | 97838.89 | 473169.54 | 483621.14 | 9.9905115 | 10.6750168 |
| 3 | 97832.87 | 472490.12 | 482956.43 | 9.9904848 | 10.6743927 |
| 2 | 97826.84 | 471812.56 | 482293.57 | 9.9904580 | 10.6737695 |
| 1 | 97820.80 | 471136.86 | 481632.58 | 9.9904312 | 10.6731471 |
| 0 | 97814.76 | 470463.01 | 480973.43 | 9.9904044 | 10.6725255 |

# 12 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 20791.17 | 21255.65 | 102234.07 | 9.3178789 | 9.3274745 |
| 1 | 20819.62 | 21286.06 | 102240.40 | 9.3184728 | 9.3280953 |
| 2 | 20848.07 | 21316.47 | 102246.73 | 9.3190659 | 9.3287153 |
| 3 | 20876.52 | 21346.88 | 102253.07 | 9.3196581 | 9.3293345 |
| 4 | 20904.97 | 21377.30 | 102259.42 | 9.3202495 | 9.3299528 |
| 5 | 20933.41 | 21407.72 | 102265.78 | 9.3208400 | 9.3305704 |
| 6 | 20961.86 | 21438.14 | 102272.15 | 9.3214297 | 9.3311872 |
| 7 | 20990.30 | 21468.57 | 102278.53 | 9.3220186 | 9.3318031 |
| 8 | 21018.74 | 21499.00 | 102284.92 | 9.3226066 | 9.3324183 |
| 9 | 21047.18 | 21529.44 | 102291.32 | 9.3231938 | 9.3330327 |
| 10 | 21075.61 | 21559.88 | 102297.73 | 9.3237802 | 9.3336463 |
| 11 | 21104.05 | 21590.32 | 102304.15 | 9.3243657 | 9.3342591 |
| 12 | 21132.48 | 21620.77 | 102310.58 | 9.3249505 | 9.3348711 |
| 13 | 21160.91 | 21651.22 | 102317.02 | 9.3255344 | 9.3354823 |
| 14 | 21189.34 | 21681.67 | 102323.47 | 9.3261174 | 9.3360927 |
| 15 | 21217.77 | 21712.13 | 102329.93 | 9.3266997 | 9.3367024 |
| 16 | 21246.19 | 21742.59 | 102336.40 | 9.3272811 | 9.3373113 |
| 17 | 21274.62 | 21773.06 | 102342.88 | 9.3278617 | 9.3379194 |
| 18 | 21303.04 | 21803.53 | 102349.37 | 9.3284416 | 9.3385267 |
| 19 | 21331.46 | 21834.00 | 102355.87 | 9.3290206 | 9.3391333 |
| 20 | 21359.88 | 21864.48 | 102362.38 | 9.3295988 | 9.3397391 |
| 21 | 21388.29 | 21894.96 | 102368.90 | 9.3301761 | 9.3403441 |
| 22 | 21416.71 | 21925.44 | 102375.43 | 9.3307527 | 9.3409484 |
| 23 | 21445.12 | 21955.93 | 102381.96 | 9.3313285 | 9.3415519 |
| 24 | 21473.53 | 21986.42 | 102388.50 | 9.3319035 | 9.34[illegible]546 |
| 25 | 21501.94 | 22016.92 | 102395.05 | 9.3324777 | 9.3427566 |
| 26 | 21530.35 | 22047.42 | 102401.61 | 9.3330511 | 9.3433578 |
| 27 | 21558.76 | 22077.93 | 102408.18 | 9.3336237 | 9.3439583 |
| 28 | 21587.16 | 22108.44 | 102414.76 | 9.3341955 | 9.3445580 |
| 29 | 21615.56 | 22138.95 | 102421.35 | 9.3347665 | 9.3451570 |
| 30 | 21643.96 | 22169.47 | 102427.95 | 9.3353368 | 9.3457552 |

# 77 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 97814.76 | 470463.01 | 480973.43 | 9.9904044 | 10.6725255 |
| 59 | 97808.71 | 469791.00 | 480316.13 | 9.9903775 | 10.6719047 |
| 58 | 97802.65 | 469120.83 | 479660.66 | 9.9903506 | 10.6712847 |
| 57 | 97796.58 | 468452.48 | 479007.02 | 9.9903237 | 10.6706655 |
| 56 | 97790.50 | 467785.95 | 478355.20 | 9.9902967 | 10.6700472 |
| 55 | 97784.41 | 467121.24 | 477705.19 | 9.9902697 | 10.6694296 |
| 54 | 97778.32 | 466458.32 | 477056.99 | 9.9902426 | 10.6688128 |
| 53 | 97772.22 | 465797.21 | 476410.58 | 9.9902155 | 10.6681969 |
| 52 | 97766.11 | 465137.88 | 475765.96 | 9.9901883 | 10.6675817 |
| 51 | 97759.99 | 464480.34 | 475123.12 | 9.9901612 | 10.6669673 |
| 50 | 97753.86 | 463824.57 | 474482.06 | 9.9901339 | 10.6663537 |
| 49 | 97747.73 | 463170.56 | 473842.77 | 9.9901067 | 10.6657409 |
| 48 | 97741.59 | 462518.32 | 473205.23 | 9.9900794 | 10.6651289 |
| 47 | 97735.44 | 461867.83 | 472569.45 | 9.9900521 | 10.6645177 |
| 46 | 97729.28 | 461219.08 | 471935.42 | 9.9900247 | 10.6639073 |
| 45 | 97723.11 | 460572.07 | 471303.13 | 9.9899973 | 10.6632976 |
| 44 | 97716.93 | 459926.80 | 470672.56 | 9.9899698 | 10.6626887 |
| 43 | 97710.75 | 459283.25 | 470043.72 | 9.9899423 | 10.6620806 |
| 42 | 97704.56 | 458641.41 | 469416.60 | 9.9899148 | 10.6614733 |
| 41 | 97698.36 | 458001.29 | 468791.19 | 9.9898873 | 10.6608667 |
| 40 | 97692.15 | 457362.87 | 468167.48 | 9.9898597 | 10.6602609 |
| 39 | 97685.93 | 456726.14 | 467545.48 | 9.9898320 | 10.6596559 |
| 38 | 97679.70 | 456091.11 | 466925.16 | 9.9898043 | 10.6590516 |
| 37 | 97673.47 | 455457.76 | 466306.52 | 9.9897766 | 10.6584481 |
| 36 | 97667.23 | 454826.08 | 465689.56 | 9.9897489 | 10.6578454 |
| 35 | 97660.98 | 454196.08 | 465074.27 | 9.9897211 | 10.6572434 |
| 34 | 97654.72 | 453567.73 | 464460.64 | 9.9896932 | 10.6566422 |
| 33 | 97648.45 | 452941.05 | 463848.67 | 9.9896654 | 10.6560417 |
| 32 | 97642.17 | 452316.01 | 463238.35 | 9.9896374 | 10.6554420 |
| 31 | 97635.89 | 451692.61 | 462629.67 | 9.9896095 | 10.6548430 |
| 30 | 97629.60 | 451070.85 | 462022.63 | 9.9895815 | 10.6542448 |

# 12 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 21643.96 | 22169.47 | 102427.95 | 9.3353368 | 9.3457552 |
| 31 | 21672.36 | 22199.99 | 102434.56 | 9.3359062 | 9.3463527 |
| 32 | 21700.76 | 22230.51 | 102441.18 | 9.3364749 | 9.3469494 |
| 33 | 21729.15 | 22261.04 | 102447.81 | 9.3370428 | 9.3475454 |
| 34 | 21757.54 | 22291.57 | 102454.45 | 9.3376099 | 9.3481407 |
| 35 | 21785.93 | 22322.11 | 102461.10 | 9.3381762 | 9.3487352 |
| 36 | 21814.32 | 22352.65 | 102467.76 | 9.3387418 | 9.3493290 |
| 37 | 21842.71 | 22383.19 | 102474.43 | 9.3393065 | 9.3499220 |
| 38 | 21871.10 | 22413.74 | 102481.11 | 9.3398706 | 9.3505143 |
| 39 | 21899.48 | 22444.29 | 102487.80 | 9.3404338 | 9.3511059 |
| 40 | 21927.86 | 22474.85 | 102494.49 | 9.3409963 | 9.3516968 |
| 41 | 21956.24 | 22505.41 | 102501.19 | 9.3415580 | 9.3522869 |
| 42 | 21984.62 | 22535.97 | 102507.90 | 9.3421190 | 9.3528763 |
| 43 | 22013.00 | 22566.54 | 102514.62 | 9.3426792 | 9.3534650 |
| 44 | 22041.37 | 22597.11 | 102521.35 | 9.3432386 | 9.3540530 |
| 45 | 22069.74 | 22627.69 | 102528.09 | 9.3437973 | 9.3546402 |
| 46 | 22098.11 | 22658.27 | 102534.84 | 9.3443552 | 9.3552267 |
| 47 | 22126.48 | 22688.85 | 102541.60 | 9.3449124 | 9.3558126 |
| 48 | 22154.85 | 22719.44 | 102548.37 | 9.3454688 | 9.3563977 |
| 49 | 22183.21 | 22750.03 | 102555.15 | 9.3460245 | 9.3569821 |
| 50 | 22211.58 | 22780.63 | 102561.94 | 9.3465794 | 9.3575658 |
| 51 | 22239.94 | 22811.23 | 102568.74 | 9.3471336 | 9.3581487 |
| 52 | 22268.30 | 22841.83 | 102575.55 | 9.3476870 | 9.3587310 |
| 53 | 22296.66 | 22872.44 | 102582.37 | 9.3482397 | 9.3593126 |
| 54 | 22325.01 | 22903.05 | 102589.20 | 9.3487917 | 9.3598935 |
| 55 | 22353.37 | 22933.67 | 102596.04 | 9.3493429 | 9.3604736 |
| 56 | 22381.72 | 22964.29 | 102602.89 | 9.3498934 | 9.3610531 |
| 57 | 22410.07 | 22994.92 | 102609.75 | 9.3504432 | 9.3616319 |
| 58 | 22438.41 | 23025.55 | 102616.62 | 9.3509922 | 9.3622100 |
| 59 | 22466.76 | 23056.18 | 102623.50 | 9.3515405 | 9.3627874 |
| 60 | 22495.11 | 23086.82 | 102630.39 | 9.3520880 | 9.3663641 |

# 77 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log. Tan |
|---|---|---|---|---|---|
| 30 | 97629.60 | 451070.85 | 462022.63 | 9.9895815 | 10.6542448 |
| 29 | 97623.30 | 450450.72 | 461417.22 | 9.9895535 | 10.6536473 |
| 28 | 97616.99 | 449832.21 | 460813.43 | 9.9895254 | 10.6530506 |
| 27 | 97610.67 | 449215.32 | 460211.26 | 9.9894973 | 10.6524546 |
| 26 | 97604.35 | 448600.04 | 459610.70 | 9.9894692 | 10.6518593 |
| 25 | 97598.02 | 447986.36 | 459011.74 | 9.9894410 | 10.6512648 |
| 24 | 97591.68 | 447374.28 | 458414.39 | 9.9894128 | 10.6506710 |
| 23 | 97585.33 | 446763.79 | 457818.62 | 9.9893845 | 10.6500780 |
| 22 | 97578.97 | 446154.89 | 457224.44 | 9.9893562 | 10.6494857 |
| 21 | 97572.60 | 445547.56 | 456631.83 | 9.9893279 | 10.6488941 |
| 20 | 97566.23 | 444941.81 | 456040.80 | 9.9892995 | 10.6483032 |
| 19 | 97559.85 | 444337.62 | 455451.34 | 9.9892711 | 10.6477131 |
| 18 | 97553.46 | 443734.99 | 454863.44 | 9.9892427 | 10.6471237 |
| 17 | 97547.06 | 443133.92 | 454277.09 | 9.9892142 | 10.6465350 |
| 16 | 97540.65 | 442534.39 | 453692.29 | 9.9891856 | 10.6459470 |
| 15 | 97534.23 | 441936.41 | 453109.03 | 9.9891571 | 10.6453598 |
| 14 | 97527.81 | 441339.96 | 452527.30 | 9.9891285 | 10.6447733 |
| 13 | 97521.38 | 440745.04 | 451947.11 | 9.9890998 | 10.6441874 |
| 12 | 97514.94 | 440151.64 | 451368.44 | 9.9890711 | 10.6436023 |
| 11 | 97508.49 | 439559.76 | 450791.29 | 9.9890424 | 10.6430179 |
| 10 | 97502.03 | 438969.40 | 450215.65 | 9.9890137 | 10.6424342 |
| 9 | 97495.56 | 438380.54 | 449641.52 | 9.9889849 | 10.6418513 |
| 8 | 97489.09 | 437793.17 | 449068.89 | 9.9889560 | 10.6412690 |
| 7 | 97482.61 | 437207.31 | 448497.75 | 9.9889271 | 10.6406874 |
| 6 | 97476.12 | 436622.93 | 447928.10 | 9.9888982 | 10.6401065 |
| 5 | 97469.62 | 436040.03 | 447359.93 | 9.9888693 | 10.6395264 |
| 4 | 97463.11 | 435458.61 | 446793.24 | 9.9888403 | 10.6389469 |
| 3 | 97456.60 | 434878.66 | 446228.03 | 9.9888113 | 10.6383681 |
| 2 | 97450.08 | 434300.18 | 445664.28 | 9.9887822 | 10.6377900 |
| 1 | 97443.55 | 433723.16 | 445101.98 | 9.9887531 | 10.6372126 |
| 0 | 97437.01 | 433147.59 | 444541.15 | 9.9887239 | 10.6366359 |

# 13 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 22495.11 | 23086.82 | 102630.39 | 9.3520880 | 9.3633641 |
| 1 | 22523.45 | 23117.46 | 102637.29 | 9.3526349 | 9.3639401 |
| 2 | 22551.79 | 23148.11 | 102644.20 | 9.3531810 | 9.3645155 |
| 3 | 22580.13 | 23178.76 | 102651.12 | 9.3537264 | 9.3650901 |
| 4 | 22608.46 | 23209.41 | 102658.05 | 9.3542710 | 9.3656641 |
| 5 | 22636.80 | 23240.07 | 102664.99 | 9.3548150 | 9.3662374 |
| 6 | 22665.13 | 23270.73 | 102671.94 | 9.3553582 | 9.3668100 |
| 7 | 22693.46 | 23301.40 | 102678.90 | 9.3559007 | 9.3673819 |
| 8 | 22721.79 | 23332.07 | 102685.87 | 9.3564426 | 9.3679532 |
| 9 | 22750.12 | 23362.74 | 102692.84 | 9.3569836 | 9.3685238 |
| 10 | 22778.44 | 23393.42 | 102699.82 | 9.3575240 | 9.3690937 |
| 11 | 22806.77 | 23424.10 | 102706.81 | 9.3580637 | 9.3696629 |
| 12 | 22835.09 | 23454.79 | 102713.81 | 9.3586027 | 9.3702315 |
| 13 | 22863.41 | 23485.48 | 102720.82 | 9.3591409 | 9.3707994 |
| 14 | 22891.72 | 23516.17 | 102727.84 | 9.3596785 | 9.3713667 |
| 15 | 22920.04 | 23546.87 | 102734.87 | 9.3602154 | 9.3719333 |
| 16 | 22948.35 | 23577.58 | 102741.91 | 9.3607515 | 9.3724992 |
| 17 | 22976.66 | 23608.29 | 102748.96 | 9.3612870 | 9.3730645 |
| 18 | 23004.97 | 23639.00 | 102756.02 | 9.3618217 | 9.3736291 |
| 19 | 23033.28 | 23669.72 | 102763.09 | 9.3623558 | 9.3741930 |
| 20 | 23061.59 | 23700.44 | 102770.17 | 9.3628892 | 9.3747563 |
| 21 | 23089.89 | 23731.16 | 102777.26 | 9.3634219 | 9.3753190 |
| 22 | 23118.19 | 23761.89 | 102784.36 | 9.3639539 | 9.3758810 |
| 23 | 23146.49 | 23792.62 | 102791.47 | 9.3644852 | 9.3764423 |
| 24 | 23174.79 | 23823.36 | 102798.59 | 9.3650158 | 9.3770030 |
| 25 | 23203.09 | 23854.10 | 102805.72 | 9.3655458 | 9.3775631 |
| 26 | 23231.38 | 23884.85 | 102812.86 | 9.3660750 | 9.3781225 |
| 27 | 23259.67 | 23915.60 | 102820.01 | 9.3666036 | 9.3786813 |
| 28 | 23287.96 | 23946.35 | 102827.17 | 9.3671315 | 9.3792394 |
| 29 | 23316.25 | 23977.11 | 102834.34 | 9.3676587 | 9.3797969 |
| 30 | 23344.54 | 24007.87 | 102841.52 | 9.3681853 | 9.3803537 |

# 76 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 97437.01 | 433147.59 | 444541.15 | 9.9887239 | 10.6366359 |
| 59 | 97430.46 | 432573.47 | 443981.76 | 9.9886947 | 10.6360599 |
| 58 | 97423.90 | 432000.79 | 443423.82 | 9.9886655 | 10.6354845 |
| 57 | 97417.34 | 431429.55 | 442867.31 | 9.9886363 | 10.6349099 |
| 56 | 97410.77 | 430859.74 | 442312.24 | 9.9886070 | 10.6343359 |
| 55 | 97404.19 | 430291.36 | 441758.59 | 9.9885776 | 10.6337626 |
| 54 | 97397.60 | 429724.40 | 441206.37 | 9.9885482 | 10.6331900 |
| 53 | 97391.00 | 429158.85 | 440655.56 | 9.9885188 | 10.6326181 |
| 52 | 97384.39 | 428594.72 | 440106.16 | 9.9884894 | 10.6320468 |
| 51 | 97377.78 | 428031.99 | 439558.17 | 9.9884599 | 10.6314762 |
| 50 | 97371.16 | 427470.66 | 439011.58 | 9.9884303 | 10.6309063 |
| 49 | 97364.53 | 426910.72 | 438466.38 | 9.9884008 | 10.6303371 |
| 48 | 97357.89 | 426352.18 | 437922.57 | 9.9883712 | 10.6297685 |
| 47 | 97351.24 | 425795.01 | 437380.15 | 9.9883415 | 10.6292006 |
| 46 | 97344.58 | 425239.23 | 436839.10 | 9.9883118 | 10.6286333 |
| 45 | 97337.92 | 424684.82 | 436299.43 | 9.9882821 | 10.6280667 |
| 44 | 97331.25 | 424131.77 | 435761.13 | 9.9882523 | 10.6275008 |
| 43 | 97324.57 | 423580.09 | 435224.19 | 9.9882225 | 10.6269355 |
| 42 | 97317.88 | 423029.77 | 434688.61 | 9.9881927 | 10.6263709 |
| 41 | 97311.18 | 422480.80 | 434154.38 | 9.9881628 | 10.6258070 |
| 40 | 97304.48 | 421933.18 | 433621.50 | 9.9881329 | 10.6252437 |
| 39 | 97297.77 | 421386.90 | 433089.96 | 9.9881029 | 10.6246810 |
| 38 | 97291.05 | 420841.96 | 432559.77 | 9.9880729 | 10.6241190 |
| 37 | 97284.32 | 420298.35 | 432030.90 | 9.9880429 | 10.6235577 |
| 36 | 97277.58 | 419756.06 | 431503.36 | 9.9880128 | 10.6229970 |
| 35 | 97270.84 | 419215.10 | 430977.15 | 9.9879827 | 10.6224369 |
| 34 | 97264.09 | 418675.46 | 430452.25 | 9.9879525 | 10.6218775 |
| 33 | 97257.33 | 418137.13 | 429928.67 | 9.9879223 | 10.6213187 |
| 32 | 97250.56 | 417600.11 | 429406.40 | 9.9878921 | 10.6207606 |
| 31 | 97243.78 | 417064.40 | 428885.43 | 9.9878618 | 10.6202031 |
| 30 | 97236.99 | 416529.98 | 428365.76 | 9.9878315 | 10.6196463 |

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan |
|---|---|---|---|---|---|
| 30 | 23344.54 | 24007.87 | 102841.52 | 9.3681853 | 9.3803537 |
| 31 | 23372.82 | 24038.64 | 102848.71 | 9.3687111 | 9.3809100 |
| 32 | 23401.10 | 24069.41 | 102855.91 | 9.3692363 | 9.3814655 |
| 33 | 23429.38 | 24100.19 | 102863.12 | 9.3697608 | 9.3820205 |
| 34 | 23457.66 | 24130.97 | 102870.34 | 9.3702847 | 9.3825748 |
| 35 | 23485.94 | 24161.76 | 102877.57 | 9.3708079 | 9.3831285 |
| 36 | 23514.21 | 24192.55 | 102884.81 | 9.3713304 | 9.3836816 |
| 37 | 23542.48 | 24223.34 | 102892.06 | 9.3718523 | 9.3842340 |
| 38 | 23570.75 | 24254.14 | 102899.32 | 9.3723735 | 9.3847858 |
| 39 | 23599.02 | 24284.94 | 102906.58 | 9.3728940 | 9.3853370 |
| 40 | 23627.29 | 24315.75 | 102913.85 | 9.3734139 | 9.3858876 |
| 41 | 23655.55 | 24346.56 | 102921.13 | 9.3739331 | 8.3864376 |
| 42 | 23683.81 | 24377.37 | 102928.42 | 9.3744517 | 9.3869869 |
| 43 | 23712.07 | 24408.19 | 102935.72 | 8.3749696 | 9.3875356 |
| 44 | 23740.33 | 24439.01 | 102943.03 | 9.3754868 | 9.3880837 |
| 45 | 23768.59 | 24469.84 | 102950.35 | 9.3760034 | 9.3886312 |
| 46 | 23796.84 | 24500.67 | 102957.68 | 9.3765194 | 9.3891781 |
| 47 | 23825.10 | 24531.51 | 102965.02 | 9.3770347 | 9.3897244 |
| 48 | 23853.35 | 24562.35 | 102972.37 | 9.3775493 | 9.3902700 |
| 49 | 23881.59 | 24593.20 | 102979.73 | 9.3780633 | 9.3908151 |
| 50 | 23909.84 | 24624.05 | 102987.10 | 9.3785767 | 9.3913595 |
| 51 | 23938.08 | 24654.91 | 102994.48 | 9.3790894 | 9.3919034 |
| 52 | 23966.33 | 24685.77 | 103001.87 | 9.3796015 | 9.3924466 |
| 53 | 23994.57 | 24716.63 | 103009.27 | 9.3801129 | 9.3929893 |
| 54 | 24022.80 | 24747.50 | 103016.68 | 9.3806237 | 9.3935313 |
| 55 | 24051.04 | 24778.37 | 103024.10 | 9.3811339 | 9.3940727 |
| 56 | 24079.27 | 24809.25 | 103031.53 | 9.3816434 | 9.3946136 |
| 57 | 24107.51 | 24840.13 | 103038.97 | 9.3821523 | 9.3951538 |
| 58 | 24135.74 | 24871.02 | 103046.42 | 9.3826605 | 9.3956935 |
| 59 | 24163.96 | 24901.91 | 103053.88 | 9.3831682 | 9.3962326 |
| 60 | 24192.19 | 24932.80 | 103061.35 | 9.3836752 | 9.3967711 |

# 76 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 97236.99 | 416529.98 | 428365.76 | 9.9878315 | 10.6196463 |
| 29 | 97230.19 | 415996.85 | 427847.38 | 9.9878012 | 10.6190900 |
| 28 | 97223.39 | 415465.01 | 427330.29 | 9.9877708 | 10.6185345 |
| 27 | 97216.58 | 414934.46 | 426814.49 | 9.9877404 | 10.6179795 |
| 26 | 97209.76 | 414405.19 | 426299.96 | 9.9877059 | 10.6174252 |
| 25 | 97202.93 | 413877.19 | 425786.71 | 9.9876794 | 10.6168715 |
| 24 | 97196.09 | 413350.46 | 425274.74 | 9.9876488 | 10.6163184 |
| 23 | 97189.25 | 412824.99 | 424764.02 | 9.9876183 | 10.6157660 |
| 22 | 97182.40 | 412300.79 | 424254.57 | 9.9875876 | 10.6152142 |
| 21 | 97175.54 | 411777.84 | 423746.37 | 9.9875570 | 10.6146630 |
| 20 | 97168.67 | 411256.14 | 423239.43 | 9.9875263 | 10.6141124 |
| 19 | 97161.79 | 410735.69 | 422733.73 | 9.9874955 | 10.6135624 |
| 18 | 97154.91 | 410216.49 | 422229.28 | 9.9874648 | 10.6130131 |
| 17 | 97148.02 | 409698.52 | 421726.06 | 9.9874339 | 10.6124644 |
| 16 | 97141.12 | 409181.78 | 421224.08 | 9.9874031 | 10.6119163 |
| 15 | 97134.21 | 408666.27 | 420723.33 | 9.9873722 | 10.6113688 |
| 14 | 97127.29 | 408151.99 | 420223.80 | 9.9873413 | 10.6108219 |
| 13 | 97120.36 | 407638.92 | 419725.49 | 9.9873103 | 10.6102756 |
| 12 | 97113.43 | 407127.07 | 419228.40 | 9.9872793 | 10.6097300 |
| 11 | 97106.49 | 406616.43 | 418732.52 | 9.9872482 | 10.6091849 |
| 10 | 97099.54 | 406107.00 | 418237.85 | 9.9872171 | 10.6086405 |
| 9 | 97092.58 | 405598.77 | 417744.38 | 9.9871860 | 10.6080966 |
| 8 | 27085.61 | 405091.74 | 417252.10 | 9.9871549 | 10.6075534 |
| 7 | 97078.63 | 404585.90 | 416761.02 | 9.9871236 | 10.6070107 |
| 6 | 97071.65 | 404081.25 | 416271.14 | 9.9870924 | 10.6064687 |
| 5 | 97064.66 | 403577.79 | 415782.43 | 9.9870611 | 10.6059273 |
| 4 | 97057 66 | 403075.50 | 415294.91 | 9.9870298 | 10.6053864 |
| 3 | 97050.65 | 402574.40 | 414808.56 | 9.9869984 | 10.6048462 |
| 2 | 97043.63 | 402074.46 | 414323.39 | 9.9869670 | 10.6043065 |
| 1 | 97036.60 | 401575.70 | 413839.39 | 9.9869356 | 10.6037674 |
| 0 | 97029.57 | 401078.09 | 413356.55 | 9.9869041 | 10.6032289 |

# 14 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 24192.19 | 24932.80 | 103061.35 | 9.3836752 | 9.3967711 |
| 1 | 24220.41 | 24963.70 | 103068.83 | 9.3841815 | 9.3973089 |
| 2 | 24248.63 | 24994.60 | 103076.32 | 9.3846873 | 9.3978463 |
| 3 | 24276.85 | 25025.51 | 103083.82 | 9.3851924 | 9.3983830 |
| 4 | 24305.07 | 25056.42 | 103091.33 | 9.3856969 | 9.3989191 |
| 5 | 24333.29 | 25087.34 | 103098.85 | 9.3862008 | 9.3994547 |
| 6 | 24361.50 | 25118.26 | 103106.38 | 9.3867040 | 9.3999896 |
| 7 | 24389.71 | 25149.19 | 103113.92 | 9.3872067 | 9.4005240 |
| 8 | 24417.92 | 25180.12 | 103121.47 | 9.3877087 | 9.4010578 |
| 9 | 24446.13 | 25211.06 | 103129.03 | 9.3882101 | 9.4015910 |
| 10 | 24474.33 | 25242.00 | 103136.60 | 9.3887109 | 9.4021237 |
| 11 | 24502.54 | 25272.94 | 103144.18 | 9.3892111 | 9.4026558 |
| 12 | 24530.74 | 25303.89 | 103151.77 | 9.3897106 | 9.4031873 |
| 13 | 24558.94 | 25334.84 | 103159.36 | 9.3902096 | 9.4037182 |
| 14 | 24587.13 | 25365.80 | 103166.97 | 9.3907079 | 9.4042486 |
| 15 | 24615.33 | 25396.76 | 103174.59 | 9.3912057 | 9.4047784 |
| 16 | 24643.52 | 25427.73 | 103182.22 | 9.3917028 | 9.4053076 |
| 17 | 24671.71 | 25458.70 | 103189.85 | 9.3921993 | 9.4058363 |
| 18 | 24699.90 | 25489.68 | 103197.50 | 9.3926952 | 9.4063644 |
| 19 | 24728.09 | 25520.66 | 103205.16 | 9.3931905 | 9.4068919 |
| 20 | 24756.27 | 25551.65 | 103212.82 | 9.3936852 | 9.4074189 |
| 21 | 24784.45 | 25582.64 | 103220.50 | 9.3941794 | 9.4079453 |
| 22 | 24812.63 | 25613.63 | 103228.18 | 9.3946729 | 9.4084712 |
| 23 | 24840.81 | 25644.63 | 103235.88 | 9.3951658 | 9.4089965 |
| 24 | 24868.99 | 25675.63 | 103243.59 | 9.3956581 | 9.4095212 |
| 25 | 24897.16 | 25706.64 | 103251.30 | 9.3961499 | 9.4100454 |
| 26 | 24925.33 | 25737.66 | 103259.03 | 9.3966410 | 9.4105690 |
| 27 | 24953.50 | 25768.68 | 103266.76 | 9.3971315 | 9.4110921 |
| 28 | 24981.67 | 25799.70 | 103274.51 | 9.3976215 | 9.4116146 |
| 29 | 25009.84 | 25830.73 | 103282.27 | 9.3981109 | 9.4121366 |
| 30 | 25038.00 | 25861.76 | 103290.03 | 9.3985996 | 9.4126581 |

# 75 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 97029.57 | 401078.09 | 413356.55 | 9.9869041 | 10.6032289 |
| 59 | 97022.53 | 400581.65 | 412874.87 | 9.9868726 | 10.6026911 |
| 58 | 97015.48 | 400086.36 | 412394.35 | 9.9868410 | 10.6021537 |
| 57 | 97008.42 | 399592.23 | 411914.98 | 9.9868094 | 10.6016170 |
| 56 | 97001.35 | 399099.24 | 411436.75 | 9.9867778 | 10.6010809 |
| 55 | 96994.28 | 398607.39 | 410959.67 | 9.9867461 | 10.6005453 |
| 54 | 96987.20 | 398116.69 | 410483.74 | 9.9867144 | 10.6000104 |
| 53 | 96980.11 | 397627.12 | 410008.93 | 9.9866827 | 10.5994760 |
| 52 | 96973.01 | 397138.68 | 409535.26 | 9.9866509 | 10.5989422 |
| 51 | 96965.90 | 396651.37 | 409062.72 | 9.9866191 | 10.5984090 |
| 50 | 96958.79 | 396165.18 | 408591.30 | 9.9865872 | 10.5978763 |
| 49 | 96951.67 | 395680.11 | 408121.00 | 9.9865553 | 10.5973442 |
| 48 | 96944.54 | 395196.15 | 407651.81 | 9.9865233 | 10.5968127 |
| 47 | 96937.40 | 394713.31 | 407183.74 | 9.9864913 | 10.5962818 |
| 46 | 96930.25 | 394231.57 | 406716.77 | 9.9864593 | 10.5957514 |
| 45 | 96923.09 | 393750.94 | 406250.91 | 9.9864273 | 10.5952216 |
| 44 | 96915.92 | 393271.41 | 405786.15 | 9.9863952 | 10.5946924 |
| 43 | 96908.75 | 392792.97 | 405322.49 | 9.9863630 | 10.5941637 |
| 42 | 96901.57 | 392315.63 | 404859.92 | 9.9863308 | 10.5936356 |
| 41 | 96894.38 | 391839.37 | 404398.44 | 9.9862986 | 10.5931081 |
| 40 | 96887.18 | 391364.20 | 403938.04 | 9.9862663 | 10.5925811 |
| 39 | 96879.98 | 390890.11 | 403478.72 | 9.9862340 | 10.5920547 |
| 38 | 96872.77 | 390417.10 | 403020.48 | 9.9862017 | 10.5915288 |
| 37 | 96865.55 | 389945.16 | 402563.32 | 9.9861693 | 10.5910035 |
| 36 | 96858.32 | 389474.29 | 402107.22 | 9.9861369 | 10.5904788 |
| 35 | 96851.08 | 389004.48 | 401652.19 | 9.9861045 | 10.5899546 |
| 34 | 96843.83 | 388535.74 | 401198.23 | 9.9860720 | 10.5894310 |
| 33 | 96836.57 | 388068.05 | 400745.32 | 9.9860394 | 10.5889079 |
| 32 | 96829.31 | 387601.42 | 400293.47 | 9.9860069 | 10.5883854 |
| 31 | 96822.04 | 387135.84 | 399842.67 | 9.9859742 | 10.5878634 |
| 30 | 96814.76 | 386671.31 | 399392.92 | 9.9859416 | 10.5873419 |

## 14 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 25038.00 | 25861.76 | 103290.03 | 9.3985996 | 9.4126581 |
| 31 | 25066.16 | 25892.80 | 103297.81 | 9.3990878 | 9.4131789 |
| 32 | 25094.32 | 25923.84 | 103305.59 | 9.3995754 | 9.4136993 |
| 33 | 25122.48 | 25954.88 | 103313.39 | 9.4000625 | 9.4142191 |
| 34 | 25150.63 | 25985.93 | 103321.19 | 9.4005489 | 9.4147383 |
| 35 | 25178.79 | 26016.99 | 103329.01 | 9.4010348 | 9.4152570 |
| 36 | 25206.94 | 26048.05 | 103336.83 | 9.4015201 | 9.4157752 |
| 37 | 25235.08 | 26079.11 | 103344.67 | 9.4020048 | 9.4162928 |
| 38 | 25263.23 | 26110.18 | 103352.51 | 9.4024889 | 9.4168099 |
| 39 | 25291.37 | 26141.26 | 103360.37 | 9.4029734 | 9.4173265 |
| 40 | 25319.52 | 26172.34 | 103368.23 | 9.4034554 | 9.4178425 |
| 41 | 25347.66 | 26203.42 | 103376.11 | 9.4039378 | 9.4183580 |
| 42 | 25375.79 | 26234.51 | 103383.99 | 9.4044196 | 9.4188729 |
| 43 | 25403.93 | 26265.60 | 103391.88 | 9.4049009 | 9.4193874 |
| 44 | 25432.06 | 26296.70 | 103399.79 | 9.4053816 | 9.4199013 |
| 45 | 25460.19 | 26327.80 | 103407.70 | 9.4058617 | 9.4204146 |
| 46 | 25488.32 | 26358.91 | 103415.63 | 9.4063413 | 9.4209275 |
| 47 | 25516.45 | 26390.02 | 103423.56 | 9.4068203 | 9.4214398 |
| 48 | 25544.58 | 26421.14 | 103431.51 | 9.4072987 | 9.4219515 |
| 49 | 25572.70 | 26452.26 | 103439.46 | 9.4077766 | 9.4224628 |
| 50 | 25600.82 | 26483.39 | 103447.43 | 9.4082539 | 9.4229735 |
| 51 | 25628.94 | 26514.52 | 103455.40 | 9.4087306 | 9.4234838 |
| 52 | 25657.05 | 26545.66 | 103463.38 | 9.4092068 | 9.4239935 |
| 53 | 25685.17 | 26576.80 | 103471.38 | 9.4096824 | 9.4245026 |
| 54 | 25713.28 | 26607.94 | 103479.38 | 9.4101575 | 9.4250113 |
| 55 | 25741.39 | 26639.09 | 103487.40 | 9.4106320 | 9.4255194 |
| 56 | 25769.50 | 26670.25 | 103495.42 | 9.4111059 | 9.4260271 |
| 57 | 25797.60 | 26701.41 | 103503.46 | 9.4115793 | 9.4265342 |
| 58 | 25825.70 | 26732.57 | 103511.50 | 9.4120522 | 9.4270408 |
| 59 | 25853.81 | 26763.74 | 103519.55 | 9.4125245 | 9.4275469 |
| 60 | 25881.90 | 26794.92 | 103527.62 | 9.4129962 | 9.4280525 |

# 75 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 96814.76 | 386671.31 | 399392.92 | 9.9859416 | 10.5873419 |
| 29 | 96807.47 | 386207.82 | 398944.21 | 9.9859089 | 10.5868211 |
| 28 | 96800.18 | 385745.37 | 398496.54 | 9.9858762 | 10.5863007 |
| 27 | 96792.88 | 385283.96 | 398049.91 | 9.9858434 | 10.5857809 |
| 26 | 96785.57 | 384823.58 | 397604.31 | 9.9858106 | 10.5852617 |
| 25 | 96778.25 | 384364.24 | 397159.75 | 9.9857777 | 10.5847430 |
| 24 | 96770.92 | 383905.91 | 396716.21 | 9.9857449 | 10.5842248 |
| 23 | 96763.58 | 383448.61 | 396273.69 | 9.9857119 | 10.5837072 |
| 22 | 96756.23 | 382992.33 | 395832.19 | 9.9856790 | 10.5831901 |
| 21 | 96748.88 | 382537.07 | 395391.71 | 9.9856460 | 10.5826735 |
| 20 | 96741.52 | 382082.81 | 394952.24 | 9.9856129 | 10.5821575 |
| 19 | 96734.15 | 381629.57 | 394513.79 | 9.9855798 | 10.5816420 |
| 18 | 96726.77 | 381177.33 | 394076.33 | 8.9855467 | 10.5811271 |
| 17 | 96719.38 | 380726.09 | 393639.88 | 9.9855135 | 10.5806126 |
| 16 | 96711.99 | 380275.85 | 393204.43 | 9.9854803 | 10.5800987 |
| 15 | 96704.59 | 379826.61 | 392769.97 | 9.9854471 | 10.5795854 |
| 14 | 96697.18 | 379378.35 | 392336.51 | 9.9854138 | 10.5790725 |
| 13 | 96689.76 | 378931.09 | 391904.03 | 9.9853805 | 10.5785602 |
| 12 | 96682.33 | 378484.81 | 391472.54 | 9.9853471 | 10.5780485 |
| 11 | 96674.90 | 378039.51 | 391042.03 | 9.9853138 | 10.5775372 |
| 10 | 96667.45 | 377595.19 | 390612.50 | 9.9852803 | 10.5770265 |
| 9 | 96660.01 | 377151.85 | 390183.95 | 9.9852468 | 10.5765162 |
| 8 | 96652.55 | 376709.47 | 389756.37 | 9.9852133 | 10.5760065 |
| 7 | 96645.08 | 376268.07 | 389329.76 | 9.9851798 | 10.5754974 |
| 6 | 96637.60 | 375827.63 | 388904.11 | 9.9851462 | 10.5749887 |
| 5 | 96630.12 | 375388.15 | 388479.43 | 9.9851125 | 10.5744806 |
| 4 | 96622.63 | 374949.63 | 388055.70 | 9.9850789 | 10.5739729 |
| 3 | 96615.13 | 374512.07 | 387632.93 | 9.9850452 | 10.5734658 |
| 2 | 96607.62 | 374075.46 | 387211.12 | 9.9850114 | 10.5729592 |
| 1 | 96600.10 | 373639.80 | 386790.25 | 9.9849776 | 10.5724531 |
| 0 | 96592.58 | 373205.08 | 386370.33 | 9.9849438 | 10.5719475 |

# 15 Grad.

| Minut. | Sinus | Tang. | Secans | | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|---|
| 0 | 25881.90 | 26794.92 | 103527.62 | | 9.4129962 | 9.4280525 |
| 1 | 25910.00 | 26826.10 | 103535.69 | | 9.4134674 | 9.4285575 |
| 2 | 25938.10 | 26857.28 | 103543.78 | | 9.4139381 | 9.4290621 |
| 3 | 25966.19 | 26888.47 | 103551.87 | | 9.4144082 | 9.4295661 |
| 4 | 25994.28 | 26919.67 | 103559.98 | | 9.4148778 | 9.4300697 |
| 5 | 26022.37 | 26950.87 | 103568.09 | | 9.4153468 | 9.4305727 |
| 6 | 26050.45 | 26982.07 | 103576.21 | | 9.4158152 | 9.4310753 |
| 7 | 26078.53 | 27013.28 | 103584.35 | | 9.4162832 | 9.4315773 |
| 8 | 26106.61 | 27044.49 | 103592.49 | | 9.4167506 | 9.4320789 |
| 9 | 26134.69 | 27075.71 | 103600.65 | | 9.4172174 | 9.4325799 |
| 10 | 26162.77 | 27106.93 | 103608.81 | | 9.4176837 | 9.4330804 |
| 11 | 26190.85 | 27138.16 | 103616.99 | | 9.4181495 | 9.4335805 |
| 12 | 26218.92 | 27169.40 | 103625.17 | | 9.4186148 | 9.4340800 |
| 13 | 26246.99 | 27200.64 | 103633.37 | | 9.4190795 | 9.4345791 |
| 14 | 26275.06 | 27231.88 | 103641.57 | | 9.4195436 | 9.4350776 |
| 15 | 26303.12 | 27263.13 | 103649.79 | | 9.4200073 | 9.4355757 |
| 16 | 26331.18 | 27294.38 | 103658.01 | | 9.4204704 | 9.4360733 |
| 17 | 26359.24 | 27325.64 | 103666.25 | | 9.4209330 | 9.4365704 |
| 18 | 26387.30 | 27356.90 | 103674.49 | | 9.4213950 | 9.4370670 |
| 19 | 26415.36 | 27388.17 | 103682.75 | | 9.4218566 | 9.4375631 |
| 20 | 26443.42 | 27419.44 | 103691.01 | | 9.4223176 | 9.4380587 |
| 21 | 26471.47 | 27450.72 | 103699.29 | | 9.4227780 | 9.4385538 |
| 22 | 26499.52 | 27482.01 | 103707.57 | | 9.4232380 | 9.4390485 |
| 23 | 26527.57 | 27513.30 | 103715.87 | | 9.4236974 | 9.4395426 |
| 24 | 26555.61 | 27544.59 | 103724.17 | | 9.4241563 | 9.4400363 |
| 25 | 26583.65 | 27575.89 | 103732.49 | | 9.4246147 | 9.4405295 |
| 26 | 26611.69 | 27607.19 | 103740.82 | | 9.4250726 | 9.4410222 |
| 27 | 26639.73 | 27638.50 | 103749.15 | | 9.4255299 | 9.4415145 |
| 28 | 26667.77 | 27669.81 | 103757.50 | | 9.4259867 | 9.4420062 |
| 29 | 26695.81 | 27701.13 | 103765.85 | | 9.4264430 | 9.4424975 |
| 30 | 26723.84 | 27732.45 | 103774.22 | | 9.4268988 | 9.4429883 |

# 74 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 96592.58 | 373205.08 | 386370.33 | 9.9849438 | 10.5719475 |
| 59 | 96585.05 | 372771.31 | 385951.35 | 9.9849099 | 10.5714425 |
| 58 | 96577.51 | 372338.47 | 385533.32 | 9.9848760 | 10.5709379 |
| 57 | 96569.96 | 371906.58 | 385116.22 | 9.9848420 | 10.5704339 |
| 56 | 96562.40 | 371475.61 | 384700.05 | 9.9848081 | 10.5699303 |
| 55 | 96554.83 | 371045.58 | 384284.82 | 9.9847740 | 10.5694273 |
| 54 | 96547.26 | 370616.48 | 383870.51 | 9.9847400 | 10.5689247 |
| 53 | 96539.68 | 370188.30 | 383457.13 | 9.9847059 | 10.5684227 |
| 52 | 96532.09 | 369761.03 | 383044.67 | 9.9846717 | 10.5679211 |
| 51 | 96524.49 | 369334.69 | 382633.13 | 9.9846375 | 10.5674201 |
| 50 | 96516.88 | 368909.27 | 382222.51 | 9.9846033 | 10.5669196 |
| 49 | 96509.27 | 368484.75 | 381812.80 | 9.9845690 | 10.5664195 |
| 48 | 96501.65 | 368061.15 | 381403.99 | 9.9845347 | 10.5659200 |
| 47 | 96494.02 | 367638.45 | 380996.10 | 9.9845004 | 10.5654209 |
| 46 | 96486.38 | 367216.65 | 380589.11 | 9.9844660 | 10.5649224 |
| 45 | 96478.73 | 366795.75 | 380183.01 | 9.9844316 | 10.5644243 |
| 44 | 96471.07 | 366375.75 | 379777.82 | 9.9843971 | 10.5639267 |
| 43 | 96463.41 | 365956.65 | 379373.52 | 9.9843626 | 10.5634296 |
| 42 | 96455.74 | 365538.44 | 378970.11 | 9.9843281 | 10.5629330 |
| 41 | 96448.06 | 365121.11 | 378567.60 | 9.9842935 | 10.5624369 |
| 40 | 96440.37 | 364704.67 | 378165.96 | 9.9842589 | 10.5619413 |
| 39 | 96432.67 | 364289.11 | 377765.22 | 9.9842242 | 10.5614462 |
| 38 | 96424.97 | 363874.44 | 377365.35 | 9.9841895 | 10.5609515 |
| 37 | 96417.26 | 363460.64 | 376966.36 | 9.9841548 | 10.5604574 |
| 36 | 96409.54 | 363047.71 | 376568.24 | 9.9841200 | 10.5599637 |
| 35 | 96401.81 | 362635.66 | 376171.00 | 9.9840852 | 10.5594705 |
| 34 | 96394.07 | 362224.47 | 375774.62 | 9.9840503 | 10.5589778 |
| 33 | 96386.33 | 361814.15 | 375379.11 | 9.9840154 | 10.5584855 |
| 32 | 96378.58 | 361404.69 | 374984.47 | 9.9839805 | 10.5579938 |
| 31 | 96370.82 | 360996.09 | 374590.68 | 9.9839455 | 10.5575025 |
| 30 | 96363.05 | 360588.35 | 374197.75 | 9.9839105 | 10.5570117 |

# 15 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 26723.84 | 27732.45 | 103774.22 | 9.4268988 | 9.4429883 |
| 31 | 26751.87 | 27763.78 | 103782.60 | 9.4273541 | 9.4434786 |
| 32 | 26779.89 | 27795.12 | 103790.98 | 9.4278089 | 9.4439685 |
| 33 | 26807.92 | 27826.46 | 103799.38 | 9.4282631 | 9.4444579 |
| 34 | 26835.94 | 27857.80 | 103807.79 | 9.4287169 | 9.4449468 |
| 35 | 26863.96 | 27889.15 | 103816.21 | 9.4291701 | 9.4454352 |
| 36 | 26891.98 | 27920.50 | 103824.63 | 9.4296228 | 9.4459232 |
| 37 | 26920.00 | 27951.86 | 103833.07 | 9.4300750 | 9.4464107 |
| 38 | 26948.01 | 27983.22 | 103841.52 | 9.4305267 | 9.4468978 |
| 39 | 26976.02 | 28014.59 | 103849.98 | 9.4309779 | 9.4473843 |
| 40 | 27004.03 | 28045.97 | 103858.44 | 9.4314286 | 9.4478704 |
| 41 | 27032.04 | 28077.35 | 103866.92 | 9.4318788 | 9.4483561 |
| 42 | 27060.04 | 28108.73 | 103875.41 | 9.4323285 | 9.4488413 |
| 43 | 27088.05 | 28140.12 | 103883.91 | 9.4327777 | 9.4493260 |
| 44 | 27116.05 | 28171.52 | 103892.42 | 9.4332264 | 9.4498102 |
| 45 | 27144.04 | 28202.92 | 103900.94 | 9.4336746 | 9.4502940 |
| 46 | 27172.04 | 28234.32 | 103909.47 | 9.4341223 | 9.4507774 |
| 47 | 27200.03 | 28265.73 | 103918.00 | 9.4345694 | 9.4512602 |
| 48 | 27228.02 | 28297.15 | 103926.55 | 9.4350161 | 9.4517427 |
| 49 | 27256.01 | 28328.57 | 103935.11 | 9.4354623 | 9.4522246 |
| 50 | 27284.00 | 28359.99 | 103943.68 | 9.4359080 | 9.4527061 |
| 51 | 27311.98 | 28391.42 | 103952.26 | 9.4363532 | 9.4531872 |
| 52 | 27339.96 | 28422.86 | 103960.85 | 9.4367980 | 9.4536678 |
| 53 | 27367.94 | 28454.30 | 103969.45 | 9.4372422 | 9.4541479 |
| 54 | 27395.92 | 28485.75 | 103978.06 | 9.4376859 | 9.4546276 |
| 55 | 27423.90 | 28517.20 | 103986.69 | 9.4381292 | 9.4551069 |
| 56 | 27451.87 | 28548.66 | 103995.32 | 9.4385719 | 9.4555857 |
| 57 | 27479.84 | 28580.12 | 104003.96 | 9.4390142 | 9.4560641 |
| 58 | 27507.81 | 28611.59 | 104012.61 | 9.4394560 | 9.4565420 |
| 59 | 27535.78 | 28643.06 | 104021.27 | 9.4398973 | 9.4570194 |
| 60 | 27563.74 | 28674.54 | 104029.94 | 9.4403381 | 9.4574964 |

# 74 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 96363.05 | 360588.35 | 374197.75 | 9.9839105 | 10.5570117 |
| 29 | 96355.27 | 360181.46 | 373805.68 | 9.9838755 | 10.5565214 |
| 28 | 96347.48 | 359775.43 | 373414.46 | 9.9838404 | 10.5560315 |
| 27 | 96339.69 | 359370.24 | 373024.09 | 9.9838052 | 10.5555421 |
| 26 | 96331.89 | 358965.90 | 372634.57 | 9.9837701 | 10.5550532 |
| 25 | 96324.08 | 358562.41 | 372245.89 | 9.9837348 | 10.5545648 |
| 24 | 96316.26 | 358159.75 | 371858.05 | 9.9836996 | 10.5540768 |
| 23 | 96308.43 | 357757.94 | 371471.05 | 9.9836643 | 10.5535893 |
| 22 | 96300.59 | 357356.96 | 371084.89 | 9.9836290 | 10.5531022 |
| 21 | 96292.75 | 356956.81 | 370699.56 | 9.9835936 | 10.5526157 |
| 20 | 96284.90 | 356557.49 | 370315.06 | 9.9835582 | 10.5521296 |
| 19 | 96277.04 | 356159.00 | 369931.39 | 9.9835227 | 10.5516439 |
| 18 | 96269.17 | 355761.33 | 369548.54 | 9.9834872 | 10.5511587 |
| 17 | 96261.30 | 355364.49 | 369166.52 | 9.9834517 | 10.5506740 |
| 16 | 96253.42 | 354968.46 | 368785.32 | 9.9834161 | 10.5501898 |
| 15 | 96245.53 | 354573.25 | 368404.93 | 9.9833805 | 10.5497060 |
| 14 | 96237.63 | 354178.86 | 368025.36 | 9.9833449 | 10.5492226 |
| 13 | 96229.72 | 353785.28 | 367646.60 | 9.9833092 | 10.5487398 |
| 12 | 96221.80 | 353392.51 | 367268.65 | 9.9832735 | 10.5482573 |
| 11 | 96213.87 | 353000.54 | 366891.51 | 9.9832377 | 10.5477754 |
| 10 | 96205.94 | 352609.38 | 366515.18 | 9.9832019 | 10.5472939 |
| 9 | 96198.00 | 352219.02 | 366139.64 | 9.9831661 | 10.5468128 |
| 8 | 96190.05 | 351829.46 | 365764.91 | 9.9831302 | 10.5463322 |
| 7 | 96182.09 | 351440.70 | 365390.97 | 9.9830942 | 10.5458521 |
| 6 | 96174.13 | 351052.73 | 365017.83 | 9.9830583 | 10.5453724 |
| 5 | 96166.16 | 350665.55 | 364645.48 | 9.9830223 | 10.5448931 |
| 4 | 96158.18 | 350279.16 | 364273.92 | 9.9829862 | 10.5444143 |
| 3 | 96150.19 | 349893.56 | 363903.15 | 9.9829501 | 10.5439359 |
| 2 | 96142.19 | 349508.74 | 363533.16 | 9.9829140 | 10.5434580 |
| 1 | 96134.18 | 349124.70 | 363163.95 | 9.9828778 | 10.5429806 |
| 0 | 96126.17 | 348741.44 | 362795.53 | 9.9828416 | 10.5425036 |

E

# 16 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan |
|---|---|---|---|---|---|
| 0 | 27563.74 | 28674.54 | 104029.94 | 9.4403381 | 9.4574964 |
| 1 | 27591.70 | 28706.02 | 104038.63 | 9.4407784 | 9.4579730 |
| 2 | 27619.65 | 28737.51 | 104047.32 | 9.4412182 | 9.4584491 |
| 3 | 27647.61 | 28769.00 | 104056.02 | 9.4416576 | 9.4589248 |
| 4 | 27675.56 | 27800.50 | 104064.73 | 9.4420965 | 9.4594001 |
| 5 | 27703.52 | 28832.01 | 104073.46 | 9.4425349 | 9.4598749 |
| 6 | 27731.47 | 28863.52 | 104082.19 | 9.4429728 | 9.4603492 |
| 7 | 27759.41 | 28895.03 | 104090.94 | 9.4434103 | 9.4608232 |
| 8 | 27787.36 | 28926.55 | 104099.69 | 9.4438472 | 9.4612967 |
| 9 | 27815.30 | 28958.08 | 104108.45 | 9.4442837 | 9.4617697 |
| 10 | 27843.24 | 28989.61 | 104117.23 | 9.4447197 | 9.4622423 |
| 11 | 27871.18 | 29021.14 | 104126.01 | 9.4451553 | 9.4627145 |
| 12 | 27899.11 | 29052.68 | 104134.81 | 9.4455904 | 9.4631863 |
| 13 | 27927.04 | 29084.23 | 104143.62 | 9.4460250 | 9.4636576 |
| 14 | 27954.97 | 29115.78 | 104152.43 | 9.4464591 | 9.4641285 |
| 15 | 27982.90 | 29147.34 | 104161.26 | 9.4468927 | 9.4645990 |
| 16 | 28010.83 | 29178.90 | 104170.09 | 9.4473259 | 9.4650690 |
| 17 | 28038.75 | 29210.47 | 104178.94 | 9.4477586 | 9.4655386 |
| 18 | 28066.67 | 29242.05 | 104187.80 | 9.4481909 | 9.4660078 |
| 19 | 28094.59 | 29273.63 | 104196.67 | 9.4486227 | 9.4664765 |
| 20 | 28122.51 | 29305.21 | 104205.54 | 9.4490540 | 9.4669448 |
| 21 | 28150.42 | 29336.80 | 104214.43 | 9.4494849 | 9.4674127 |
| 22 | 28178.33 | 29368.39 | 104223.33 | 9.4499153 | 9.4678802 |
| 23 | 28206.24 | 29399.99 | 104232.24 | 9.4503452 | 9.4683473 |
| 24 | 28234.15 | 29431.60 | 104241.16 | 9.4507747 | 9.4688139 |
| 25 | 28262.05 | 29463.21 | 104250.09 | 9.4512037 | 9.4692801 |
| 26 | 28289.95 | 29494.83 | 104259.03 | 9.4516322 | 9.4697459 |
| 27 | 28317.85 | 29526.45 | 104267.98 | 9.4520603 | 9.4702112 |
| 28 | 28345.75 | 29558.08 | 104276.94 | 9.4524879 | 9.4706762 |
| 28 | 28373.64 | 29589.71 | 104285.91 | 9.4529151 | 9.4711407 |
| 30 | 28401.53 | 29621.35 | 104294.89 | 9.4533418 | 9.4716048 |

# 73 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 96126.17 | 348741.44 | 362795.53 | 9.9828416 | 10.5425036 |
| 59 | 96118.15 | 348358.96 | 362427.88 | 9.9828054 | 10.5420270 |
| 58 | 96110.12 | 347977.26 | 362061.01 | 9.9827691 | 10.5415509 |
| 57 | 96102.08 | 347596.32 | 361694.90 | 9.9827328 | 10.5410752 |
| 56 | 96094.03 | 347216.16 | 361329.57 | 9.9826964 | 10.5405999 |
| 55 | 96085.98 | 346836.76 | 360965.01 | 9.9826600 | 10.5401251 |
| 54 | 96077.92 | 346458.13 | 360601.21 | 9.9826236 | 10.5396508 |
| 53 | 96069.85 | 346080.26 | 360238.18 | 9.9825871 | 10.5391768 |
| 52 | 96061.77 | 345703.15 | 359875.90 | 9.9825506 | 10.5387033 |
| 51 | 96053.68 | 345326.79 | 359514.39 | 9.9825140 | 10.5382303 |
| 50 | 96045.58 | 344951.20 | 359153.63 | 9.9824774 | 10.5377577 |
| 49 | 96037.48 | 344576.35 | 358793.62 | 9.9824408 | 10.5372855 |
| 48 | 96029.37 | 344202.26 | 358434.37 | 9.9824041 | 10.5368137 |
| 47 | 96021.25 | 343828.91 | 358075.86 | 9.9823674 | 10.5363424 |
| 46 | 96013.12 | 343456.31 | 357718.10 | 9.9823306 | 10.5358715 |
| 45 | 96004.98 | 343084.46 | 357361.08 | 9.9822938 | 10.5354010 |
| 44 | 95996.84 | 342713.34 | 357004.81 | 9.9822569 | 10.5349310 |
| 43 | 95988.69 | 342342.97 | 356649.28 | 9.9822201 | 10.5344614 |
| 42 | 95980.53 | 341973.33 | 356294.48 | 9.9821831 | 10.5339922 |
| 41 | 95972.36 | 341604.43 | 355940.42 | 9.9821462 | 10.5335235 |
| 40 | 95964.18 | 341236.26 | 355587.10 | 9.9821092 | 10.5330552 |
| 39 | 95956.00 | 340868.82 | 355234.50 | 9.9820721 | 10.5325873 |
| 38 | 95947.81 | 340502.10 | 354882.63 | 9.9820351 | 10.5321198 |
| 37 | 95939.61 | 340136.12 | 354531.49 | 9.9819979 | 10.5316527 |
| 36 | 95931.40 | 339770.85 | 354181.07 | 9.9819608 | 10.5311861 |
| 35 | 95923.18 | 339406.31 | 353831.38 | 9.9819236 | 10.5307199 |
| 34 | 95914.95 | 339042.49 | 353482.40 | 9.9818863 | 10.5302541 |
| 33 | 95906.72 | 338679.38 | 353134.14 | 9.9818490 | 10.5297888 |
| 32 | 95898.48 | 338316.99 | 352786.60 | 9.9818117 | 10.5293238 |
| 31 | 95890.23 | 337955.31 | 352439.77 | 9.9817744 | 10.5288593 |
| 30 | 95881.97 | 337594.34 | 352093.65 | 9.9817370 | 10.5283952 |

# 16 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan |
|---|---|---|---|---|---|
| 30 | 28401.53 | 29621.35 | 104294.89 | 9.4533418 | 9.4716048 |
| 31 | 28429.42 | 29652.99 | 104303.88 | 9.4537681 | 9.4720685 |
| 32 | 28457.31 | 29684.64 | 104312.89 | 9.4541939 | 9.4725318 |
| 33 | 28485.20 | 29716.30 | 104321.90 | 9.4546192 | 9.4729947 |
| 34 | 28513.08 | 29747.96 | 104330.92 | 9.4550441 | 9.4734571 |
| 35 | 28540.96 | 29779.62 | 104339.95 | 9.4554686 | 9.4739192 |
| 36 | 28568.84 | 29811.29 | 104349.00 | 9.4558926 | 9.4743808 |
| 37 | 28596.71 | 29842.97 | 104358.05 | 9.4563161 | 9.4748421 |
| 38 | 28624.58 | 29874.65 | 104367.12 | 9.4567392 | 9.4753029 |
| 39 | 28652.45 | 29906.34 | 104376.19 | 9.4571618 | 9.4757633 |
| 40 | 28680.32 | 29938.03 | 104385.28 | 9.4575840 | 9.4762233 |
| 41 | 28708.19 | 29969.73 | 104394.37 | 9.4580058 | 9.4766829 |
| 42 | 28736.05 | 30001.44 | 104403.48 | 9.4584271 | 9.4771421 |
| 43 | 28763.91 | 30033.15 | 104412.59 | 9.4588480 | 9.4776009 |
| 44 | 28791.77 | 30064.86 | 104421.72 | 9.4592684 | 9.4780592 |
| 45 | 28819.63 | 30096.58 | 104430.86 | 9.4596884 | 9.4785172 |
| 46 | 28847.48 | 30128.31 | 104440.01 | 9.4601079 | 9.4789748 |
| 47 | 28875.33 | 30160.04 | 104449.17 | 9.4605270 | 9.4794319 |
| 48 | 28903.18 | 30191.78 | 104458.33 | 9.4609456 | 9.4798887 |
| 49 | 28931.03 | 30223.52 | 104467.51 | 9.4613638 | 9.4803451 |
| 50 | 28958.87 | 30255.27 | 104476.70 | 9.4617816 | 9.4808011 |
| 51 | 28986.71 | 30287.03 | 104485.90 | 9.4621989 | 9.4812566 |
| 52 | 29014.55 | 30318.79 | 104495.11 | 9.4626158 | 9.4817118 |
| 53 | 29042.39 | 30350.55 | 114504.33 | 9.4630323 | 9.4821666 |
| 54 | 29070.22 | 30382.32 | 104513.57 | 9.4634483 | 9.4826210 |
| 55 | 29098.05 | 30414.10 | 104522.81 | 9.4638639 | 9.4830750 |
| 56 | 29125.88 | 30445.88 | 104532.06 | 9.4642790 | 9.4835286 |
| 57 | 29153.71 | 30477.67 | 104541.32 | 9.4646938 | 9.4839818 |
| 58 | 29181.53 | 30509.46 | 104550.60 | 9.4651081 | 9.4844346 |
| 59 | 29209.35 | 30541.26 | 104559.88 | 9.4655219 | 9.4848870 |
| 60 | 29237.17 | 30573.07 | 104569.18 | 9.4659353 | 9.4853390 |

# 73 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 95881.97 | 337594.34 | 352093.65 | 9.9817370 | 10.5283952 |
| 29 | 95873.70 | 337234.08 | 351748.24 | 9.9816995 | 10.5279315 |
| 28 | 95865.43 | 336874.53 | 351403.54 | 9.9816620 | 10.5274682 |
| 27 | 95857.15 | 336515.68 | 351059.54 | 9.9816245 | 10.5270053 |
| 26 | 95848.86 | 336157.53 | 350716.25 | 9.9815870 | 10.5265428 |
| 25 | 95840.56 | 335800.08 | 350373.65 | 9.9815494 | 10.5260808 |
| 24 | 95832.25 | 335443.33 | 350031.75 | 9.9815117 | 10.5256192 |
| 23 | 95823.94 | 335087.28 | 349690.55 | 9.9814740 | 10.5251579 |
| 22 | 95815.62 | 334731.91 | 349350.04 | 9.9814363 | 10.5246971 |
| 21 | 95807.29 | 334377.24 | 349010.23 | 9.9813986 | 10.5242367 |
| 20 | 95798.95 | 334023.26 | 348671.10 | 9.9813608 | 10.5237767 |
| 19 | 95790.60 | 333669.97 | 348332.67 | 9.9813229 | 10.5233171 |
| 18 | 95782.25 | 333317.36 | 347994.92 | 9.9812850 | 10.5228579 |
| 17 | 95773.89 | 332965.43 | 347657.85 | 9.9812471 | 10.5223991 |
| 16 | 95765.52 | 332614.19 | 347321.46 | 9.9812091 | 20.5219408 |
| 15 | 95757.14 | 332263.62 | 346985.76 | 9.9811711 | 10.5214828 |
| 14 | 95748.75 | 331913.73 | 346650.73 | 9.9811331 | 10.5210252 |
| 13 | 95740.35 | 331564.52 | 346316.37 | 9.9810950 | 10.5205681 |
| 12 | 95731.95 | 331215.98 | 345982.69 | 9.9810569 | 10.5201113 |
| 11 | 95723.54 | 330868.11 | 345649.69 | 9.9810187 | 10.5196549 |
| 10 | 95715.12 | 330520.91 | 345317.35 | 9.9809805 | 10.5191989 |
| 9 | 95706.69 | 330174.38 | 344985.68 | 9.9809423 | 10.5187434 |
| 8 | 95698.25 | 329828.51 | 344654.67 | 9.9809040 | 10.5182882 |
| 7 | 95689.81 | 329483.30 | 344324.33 | 9.9808657 | 10.5178334 |
| 6 | 95681.36 | 329138.76 | 343994.65 | 9.9808273 | 10.5173790 |
| 5 | 95672.90 | 328794.87 | 343665.63 | 9.9807889 | 10.5169250 |
| 4 | 95664.43 | 328451.64 | 343337.27 | 9.9807505 | 10.5164714 |
| 3 | 95655.95 | 328109.07 | 343009.56 | 9.9807120 | 10.5160182 |
| 2 | 95647.47 | 327767.15 | 342682.51 | 9.9806735 | 10.5155654 |
| 1 | 95638.98 | 327425.88 | 342356.11 | 9.9806349 | 10.5151130 |
| 0 | 95630.48 | 327085.26 | 342030.36 | 9.9805963 | 10.5146610 |

# 17 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan* |
|---|---|---|---|---|---|
| 0 | 29237.17 | 30573.07 | 104569.18 | 9.4659353 | 9.4853390 |
| 1 | 29264.99 | 30604.88 | 104578.48 | 9.4663483 | 9.4857907 |
| 2 | 29292.80 | 30636.69 | 104587.80 | 9.4667609 | 9.4862419 |
| 3 | 29320.61 | 32668.51 | 104597.12 | 9.4671730 | 9.4866928 |
| 4 | 29348.42 | 30700.34 | 104606.46 | 9.4675848 | 9.4871433 |
| 5 | 29376.23 | 30732.18 | 104615.81 | 9.4679960 | 9.4875933 |
| 6 | 29404.03 | 30764.02 | 104625.16 | 9.4684069 | 9.4880430 |
| 7 | 29431.83 | 30795.86 | 104634.53 | 9.4688173 | 9.4884924 |
| 8 | 29459.63 | 30827.71 | 104643.91 | 9.4692273 | 9.4889413 |
| 9 | 29487.43 | 30859.57 | 104653.30 | 9.4696369 | 9.4893898 |
| 10 | 29515.22 | 30891.43 | 104662.70 | 9.4700461 | 9.4898380 |
| 11 | 29543.01 | 30923.30 | 104672.11 | 9.4704548 | 9.4902858 |
| 12 | 29570.80 | 30955.17 | 104681.53 | 9.4708631 | 9.4907332 |
| 13 | 29598.59 | 30987.05 | 104690.96 | 9.4712710 | 9.4911802 |
| 14 | 29626.38 | 31018.93 | 104700.40 | 9.4716785 | 9.4916269 |
| 15 | 29654.16 | 31050.82 | 104709.86 | 9.4720856 | 9.4920731 |
| 16 | 29681.94 | 31082.72 | 104719.32 | 9.4724922 | 9.4925190 |
| 17 | 29709.71 | 31114.62 | 104728.79 | 9.4728985 | 9.4929646 |
| 18 | 29737.49 | 31146.53 | 104738.28 | 9.4733043 | 9.4934097 |
| 19 | 29765.26 | 31178.44 | 104747.77 | 9.4737097 | 9.4938545 |
| 20 | 29793.03 | 31210.36 | 104757.28 | 9.4741146 | 9.4942988 |
| 21 | 29820.79 | 31242.29 | 104766.79 | 9.4745192 | 9.4947429 |
| 22 | 29848.56 | 31274.22 | 104776.32 | 9.4749234 | 9.4951865 |
| 23 | 29876.32 | 31306.16 | 104785.86 | 9.4753271 | 9.4956298 |
| 24 | 29904.08 | 31338.10 | 104795.40 | 9.4757304 | 9.4960727 |
| 25 | 29931.84 | 31370.05 | 104804.96 | 9.4761334 | 9.4965152 |
| 26 | 29959.59 | 31402.00 | 104814.53 | 9.4765359 | 9.4969574 |
| 27 | 29987.34 | 31433.96 | 104824.11 | 9.4769380 | 9.4973991 |
| 28 | 30015.09 | 31465.93 | 104833.70 | 9.4773396 | 9.4978406 |
| 29 | 30042.84 | 31497.90 | 104843.30 | 9.4777409 | 9.4982816 |
| 30 | 30070.58 | 31529.88 | 104852.91 | 9.4781418 | 9.4987223 |

# 72 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 95630.48 | 327085.26 | 342030.36 | 9.9805963 | 10.5146610 |
| 59 | 95621.97 | 326745.29 | 341705.26 | 9.9805577 | 10.5142093 |
| 58 | 95613.45 | 326405.96 | 341380.80 | 9.9805190 | 10.5137581 |
| 57 | 95604.92 | 326067.28 | 341056.99 | 9.9804803 | 10.5133072 |
| 56 | 95596.39 | 325729.24 | 340733.82 | 9.9804415 | 10.5128567 |
| 55 | 95587.85 | 325391.84 | 340411.30 | 9.9804027 | 10.5124067 |
| 54 | 95579.30 | 325055.08 | 340089.41 | 9.9803639 | 10.5119570 |
| 53 | 95570.74 | 324718.95 | 339768.16 | 9.9803250 | 10.5115076 |
| 52 | 95562.17 | 324383.46 | 339447.54 | 9.9802860 | 10.5110587 |
| 51 | 95553.60 | 324048.60 | 339127.55 | 9.9802471 | 10.5106102 |
| 50 | 95545.02 | 323714.38 | 338808.20 | 9.9802081 | 10.5101620 |
| 49 | 95536.43 | 323380.78 | 338489.48 | 9.9801690 | 10.5097142 |
| 48 | 95527.83 | 323047.80 | 338171.38 | 9.9801299 | 10.5092668 |
| 47 | 95519.22 | 322715.46 | 337853.91 | 9.9800908 | 10.5088198 |
| 46 | 95510.61 | 322383.73 | 337537.07 | 9.9800516 | 10.5083731 |
| 45 | 95501.99 | 322052.63 | 337220.84 | 9.9800124 | 10.5079269 |
| 44 | 95493.36 | 321722.15 | 336905.24 | 9.9799732 | 10.5074810 |
| 43 | 95484.72 | 321392.28 | 336590.26 | 9.9799339 | 10.5070354 |
| 42 | 95476.07 | 321063.04 | 336275.89 | 9.9798946 | 10.5065903 |
| 41 | 95467.42 | 320734.40 | 335962.14 | 9.9798552 | 10.5061455 |
| 40 | 95458.76 | 320406.38 | 335649.00 | 9.9798158 | 10.5057012 |
| 39 | 95450.09 | 320078.97 | 335336.47 | 9.9797764 | 10.5052571 |
| 38 | 95441.41 | 319752.17 | 335024.55 | 9.9797369 | 10.5048135 |
| 37 | 95432.72 | 319425.98 | 334713.24 | 9.9796973 | 10.5043702 |
| 36 | 95424.03 | 319100.39 | 334402.54 | 9.9796578 | 10.5039273 |
| 35 | 95415.33 | 318775.40 | 334092.44 | 9.9796182 | 10.5034848 |
| 34 | 95406.62 | 318451.02 | 333782.94 | 9.9795785 | 10.5030426 |
| 33 | 95397.90 | 318127.24 | 333474.05 | 9.9795388 | 10.5026009 |
| 32 | 95389.17 | 317804.06 | 333165.75 | 9.9794991 | 10.5021594 |
| 31 | 95380.43 | 317481.47 | 332858.05 | 9.9794593 | 10.5017184 |
| 30 | 95371.69 | 317159.48 | 332550.95 | 9.9794195 | 10.5012777 |

# 17 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan* |
|---|---|---|---|---|---|
| 30 | 30070.58 | 31529.88 | 104852.91 | 9.4781418 | 9.4987223 |
| 31 | 30098.32 | 31561.86 | 104862.53 | 9.4785423 | 9.4991626 |
| 32 | 30126.06 | 31593.85 | 104872.17 | 9.4789423 | 9.4996026 |
| 33 | 30153.80 | 31625.85 | 104881.81 | 9.4793420 | 9.5000422 |
| 34 | 30181.53 | 31657.85 | 104891.46 | 9.4797412 | 9.5004814 |
| 35 | 30209.26 | 31689.86 | 104901.13 | 9.4801401 | 9.5009203 |
| 36 | 30236.99 | 31721.87 | 104910.80 | 9.4805385 | 9.5013588 |
| 37 | 30264.71 | 31753.89 | 104920.49 | 9.4809366 | 9.5017969 |
| 38 | 30292.44 | 31785.91 | 104930.19 | 9.4813342 | 9.5022347 |
| 39 | 30320.16 | 31817.94 | 104939.89 | 9.4817315 | 9.5026721 |
| 40 | 30347.88 | 31849.98 | 104949.61 | 9.4821283 | 9.5031092 |
| 41 | 30375.59 | 31882.02 | 104959.34 | 9.4825248 | 9.5035459 |
| 42 | 30403.31 | 31914.07 | 104969.08 | 9.4829208 | 9.5039822 |
| 43 | 30431.02 | 31946.13 | 104978.83 | 9.4833165 | 9.5044182 |
| 44 | 30458.72 | 31978.19 | 104988.59 | 9.4837117 | 9.5048538 |
| 45 | 30486.43 | 32010.25 | 104998.36 | 9.4841066 | 9.5052891 |
| 46 | 30514.13 | 32042.32 | 105008.15 | 9.4845010 | 9.5057240 |
| 47 | 30541.83 | 32074.40 | 105017.94 | 9.4848951 | 9.5061586 |
| 48 | 30569.53 | 32106.49 | 105027.74 | 9.4852888 | 9.5065928 |
| 49 | 30597.23 | 32138.58 | 105037.56 | 9.4856820 | 9.5070267 |
| 50 | 30624.92 | 32170.67 | 105047.38 | 9.4860749 | 9.5074602 |
| 51 | 30652.61 | 32202.77 | 105057.22 | 9.4864674 | 9.5078933 |
| 52 | 30680.29 | 32234.88 | 105067.06 | 9.4868595 | 9.5083261 |
| 53 | 30707.98 | 32267.00 | 105076.92 | 9.4872512 | 9.5087586 |
| 54 | 30735.66 | 32299.12 | 105086.79 | 9.4876426 | 9.5091907 |
| 55 | 30763.34 | 32331.25 | 105096.67 | 9.4880335 | 9.5096224 |
| 56 | 30791.02 | 32363.38 | 105106.56 | 9.4884240 | 9.5100539 |
| 57 | 30818.69 | 32395.52 | 105116.46 | 9.4888142 | 9.5104849 |
| 58 | 30846.36 | 32427.66 | 105126.37 | 9.4892040 | 9.5109156 |
| 59 | 30874.03 | 32459.81 | 105136.29 | 9.4895934 | 9.5113460 |
| 60 | 30901.70 | 32491.97 | 105146.22 | 9.4899824 | 9.5117760 |

# 72 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan. |
|---|---|---|---|---|---|
| 30 | 95371.69 | 317159.48 | 332550.95 | 9.9794195 | 10.5012777 |
| 29 | 95362.94 | 316838.08 | 332244.44 | 9.9793796 | 10.5008374 |
| 28 | 95354.18 | 316517.28 | 331938.53 | 9.9793398 | 10.5003974 |
| 27 | 94345.41 | 316197.06 | 331633.20 | 9.9792998 | 10.4999578 |
| 26 | 95336.64 | 315877.44 | 331328.47 | 9.9792599 | 10.4995186 |
| 25 | 95327.86 | 315558.40 | 331024.32 | 9.9792198 | 10.4990797 |
| 24 | 95319.07 | 315239.94 | 330720.76 | 9.9791798 | 10.4986412 |
| 23 | 95310.27 | 314922.07 | 330417.78 | 9.9791397 | 10.4982031 |
| 22 | 95301.46 | 314604.78 | 330115.39 | 9.9790996 | 10.4977653 |
| 21 | 95292.64 | 314288.07 | 329813.57 | 9.9790594 | 10.4973279 |
| 20 | 95283.82 | 313971.94 | 329512.34 | 9.9790192 | 10.4968908 |
| 19 | 95274.99 | 313656.39 | 329211.68 | 9.9789789 | 10.4964541 |
| 18 | 95266.15 | 313341.41 | 328911.60 | 9.9789386 | 10.4960178 |
| 17 | 95257.30 | 313027.01 | 328612.09 | 9.9788983 | 10.4955818 |
| 16 | 95248.44 | 312713.17 | 328313.16 | 9.9788579 | 10.4951462 |
| 15 | 95239.58 | 312399.91 | 328014.79 | 9.9788175 | 10.4947109 |
| 14 | 95230.71 | 312087.22 | 327717.00 | 9.9787770 | 10.4942760 |
| 13 | 95221.83 | 311775.09 | 327419.77 | 9.9787365 | 10.4938414 |
| 12 | 95212.94 | 311463.53 | 327123.11 | 9.9786960 | 10.4934072 |
| 11 | 95204.04 | 311152.54 | 326827.02 | 9.9786554 | 10.4929733 |
| 10 | 95195.14 | 310842.10 | 326531.49 | 9.9786148 | 10.4925398 |
| 9 | 95186.23 | 310532.23 | 326236.52 | 9.9785741 | 10.4921067 |
| 8 | 95177.31 | 310222.91 | 325942.11 | 9.9785334 | 10.4916739 |
| 7 | 95168.38 | 309914.16 | 325648.25 | 9.9784927 | 10.4912414 |
| 6 | 95159.44 | 309605.96 | 325354.96 | 9.9784519 | 10.4908093 |
| 5 | 95150.49 | 309298.31 | 325062.22 | 9.9784111 | 10.4903776 |
| 4 | 95141.54 | 308991.22 | 324770.03 | 9.9783702 | 10.4899461 |
| 3 | 95132.58 | 308684.68 | 324478.40 | 9.9783293 | 10.4895151 |
| 2 | 95123.61 | 308378.69 | 324187.32 | 9.9782883 | 10.4890844 |
| 1 | 95114.63 | 308073.25 | 323896.78 | 9.9782474 | 10.4886540 |
| 0 | 95105.65 | 307768.35 | 323606.89 | 9.9782063 | 10.4882240 |

# 18 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan |
|---|---|---|---|---|---|
| 0 | 30901.70 | 32491.97 | 105146.22 | 9.4899824 | 9.5117760 |
| 1 | 30929.36 | 32524.13 | 105156.17 | 9.4903710 | 9.5122057 |
| 2 | 30957.02 | 32556.30 | 105166.12 | 9.4907592 | 9.5126351 |
| 3 | 30984.68 | 32588.48 | 105176.08 | 9.4911471 | 9.5130641 |
| 4 | 31012.34 | 32620.66 | 105186.06 | 9.4915345 | 9.5134927 |
| 5 | 31039.99 | 32652.85 | 105196.05 | 9.4919216 | 9.5139210 |
| 6 | 31067.64 | 32685.04 | 105206.04 | 9.4923083 | 9.5143490 |
| 7 | 31095.29 | 32717.24 | 105216.05 | 9.4926946 | 9.5147766 |
| 8 | 31122.94 | 32749.44 | 105226.07 | 9.4930806 | 9.5152039 |
| 9 | 31150.58 | 32781.65 | 105236.10 | 9.4934661 | 9.5156309 |
| 10 | 31178.22 | 32813.87 | 105246.14 | 9.4938513 | 9.5160575 |
| 11 | 31205.86 | 32846.10 | 105256.19 | 9.4942361 | 9.5164838 |
| 12 | 31233.49 | 32878.33 | 105266.25 | 9.4946205 | 9.5169097 |
| 13 | 31261.12 | 32910.56 | 105276.33 | 9.4950046 | 9.5173353 |
| 14 | 31288.75 | 32942.80 | 105286.41 | 9.4953883 | 9.5177606 |
| 15 | 31316.38 | 32975.05 | 105296.51 | 9.4957716 | 9.5181855 |
| 16 | 31344.00 | 33007.31 | 105306.61 | 9.4961545 | 9.5186101 |
| 17 | 31371.63 | 33039.57 | 105316.73 | 9.4965370 | 9.5190344 |
| 18 | 31399.25 | 33071.84 | 105326.86 | 9.4969192 | 9.5194583 |
| 19 | 31426.86 | 33104.11 | 105336.99 | 9.4973010 | 9.5198819 |
| 20 | 31454.48 | 33136.39 | 105347.14 | 9.4976824 | 9.5203052 |
| 21 | 31482.09 | 33168.68 | 105357.30 | 9.4980635 | 9.5207282 |
| 22 | 31509.69 | 33200.97 | 105367.47 | 9.4984442 | 9.5211508 |
| 23 | 31537.30 | 33233.27 | 105377.65 | 9.4988245 | 9.5215730 |
| 24 | 31564.90 | 33265.57 | 105387.85 | 9.4992045 | 9.5219950 |
| 25 | 31592.50 | 33297.88 | 105398.05 | 9.4995840 | 9.5224166 |
| 26 | 31620.10 | 33330.20 | 105408.26 | 9.4999633 | 9.5228379 |
| 27 | 31647.70 | 33362.52 | 105418.49 | 9.5003421 | 9.5232589 |
| 28 | 31675.29 | 33394.85 | 105428.73 | 9.5007206 | 9.5236795 |
| 29 | 31702.88 | 33427.19 | 105438.97 | 9.5010987 | 9.5240999 |
| 30 | 31730.47 | 33459.53 | 105449.23 | 9.5014764 | 9.5245199 |

# 71 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 95105.65 | 307768.35 | 323606.80 | 9.9782063 | 10.4882240 |
| 59 | 95096.66 | 307464.00 | 323317.36 | 9.9781653 | 10.4877943 |
| 58 | 95087.66 | 307160.20 | 323028.46 | 9.9781241 | 10.4873649 |
| 57 | 95078.65 | 306856.93 | 322740.11 | 9.9780830 | 10.4869359 |
| 56 | 95069.63 | 306554.21 | 322452.30 | 9.9780418 | 10.4865073 |
| 55 | 95060.60 | 306252.03 | 322165.03 | 9.9780006 | 10.4860790 |
| 54 | 95051.57 | 305950.38 | 321878.30 | 9.9779593 | 10.4856510 |
| 53 | 95042.53 | 305649.28 | 321592.10 | 9.9779180 | 10.4852234 |
| 52 | 95033.48 | 305348.70 | 321306.44 | 9.9778766 | 10.4847961 |
| 51 | 95024.42 | 305048.66 | 321021.32 | 9.9778353 | 10.4843691 |
| 50 | 95015.36 | 304749.15 | 320736.73 | 9.9777938 | 10.4839425 |
| 49 | 95006.29 | 304450.18 | 320452.66 | 9.9777523 | 10.4835162 |
| 48 | 94997.21 | 304151.73 | 320169.13 | 9.9777108 | 10.4830903 |
| 47 | 94988.12 | 303853.81 | 319886.13 | 9.9776693 | 10.4826647 |
| 46 | 94979.02 | 303556.41 | 319603.65 | 9.9776277 | 10.4822394 |
| 45 | 94969.91 | 303259.54 | 319321.70 | 9.9775860 | 10.4818145 |
| 44 | 94960.80 | 302963.20 | 319040.28 | 9.9775444 | 10.4813899 |
| 43 | 94951.68 | 302667.37 | 318759.37 | 9.9775026 | 10.4809656 |
| 42 | 94942.55 | 302372.07 | 318478.99 | 9.9774609 | 10.4805417 |
| 41 | 94933.41 | 302077.28 | 318199.13 | 9.9774191 | 10.4801181 |
| 40 | 94924.26 | 301783.01 | 317919.78 | 9.9773772 | 10.4796948 |
| 39 | 94915.11 | 301489.26 | 317640.95 | 9.9773354 | 10.4792718 |
| 38 | 94905.95 | 301196.02 | 317362.64 | 9.9772934 | 10.4788492 |
| 37 | 94896.78 | 300903.30 | 317084.84 | 9.9772515 | 10.4784270 |
| 36 | 94887.60 | 300611.09 | 316807.56 | 9.9772095 | 10.4780050 |
| 35 | 94878.41 | 300319.39 | 316530.78 | 9.9771674 | 10.4775834 |
| 34 | 94869.22 | 300028.20 | 316254.52 | 9.9771253 | 10.4771621 |
| 33 | 94860.02 | 299737.51 | 315978.76 | 9.9770832 | 10.4767411 |
| 32 | 94850.81 | 299447.34 | 315703.51 | 9.9770410 | 10.4763205 |
| 31 | 94841.59 | 299157.66 | 315428.77 | 9.9769988 | 10.4759001 |
| 30 | 94832.36 | 298868.50 | 315154.53 | 9.9769566 | 10.4754801 |

# 18 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 31730.47 | 33459.53 | 105449.23 | 9.5014764 | 9.5245199 |
| 31 | 31758.05 | 33491.88 | 105459.50 | 9.5018538 | 9.5249395 |
| 32 | 31785.63 | 33524.24 | 105469.78 | 9.5022308 | 9.5253589 |
| 33 | 31813.21 | 33556.60 | 105480.07 | 9.5026075 | 9.5257779 |
| 34 | 31840.79 | 33588.97 | 105490.37 | 9.5029838 | 9.5261966 |
| 35 | 31868.36 | 33621.34 | 105500.68 | 9.5033597 | 9.5266150 |
| 36 | 31895.93 | 33653.72 | 105511.01 | 9.5037353 | 9.5270331 |
| 37 | 31923.50 | 33686.11 | 105521.34 | 9.5041105 | 9.5274508 |
| 38 | 31951.06 | 33718.50 | 105531.69 | 9.5044853 | 9.5278682 |
| 39 | 31978.63 | 33750.90 | 105542.04 | 9.5048598 | 9.5282853 |
| 40 | 32006.19 | 33783.30 | 105552.41 | 9.5052339 | 9.5287021 |
| 41 | 32033.74 | 33815.71 | 105562.79 | 9.5056077 | 9.5291186 |
| 42 | 32061.30 | 33848.13 | 105573.18 | 9.5059811 | 9.5295347 |
| 43 | 32088.85 | 33880.56 | 105583.58 | 9.5063542 | 9.5299505 |
| 44 | 32116.40 | 33912.99 | 105593.99 | 9.5067268 | 9.5303661 |
| 45 | 32143.95 | 33945.43 | 105604.41 | 9.5070992 | 9.5307813 |
| 46 | 32171.49 | 33977.87 | 105614.85 | 9.5074712 | 9.5311961 |
| 47 | 32199.03 | 34010.32 | 105625.29 | 9.5078428 | 9.5316107 |
| 48 | 32226.57 | 34042.78 | 105635.75 | 9.5082141 | 9.5320250 |
| 49 | 32254.10 | 34075.24 | 105646.21 | 9.5085850 | 9.5324389 |
| 50 | 32281.64 | 34107.71 | 105656.69 | 9.5089556 | 9.5328526 |
| 51 | 32309.17 | 34140.19 | 105667.18 | 9.5093258 | 9.5332659 |
| 52 | 32336.70 | 34172.67 | 105677.68 | 9.5096956 | 9.5336789 |
| 53 | 32364.22 | 34205.16 | 105688.19 | 9.5100651 | 9.5340916 |
| 54 | 32391.74 | 34237.65 | 105698.71 | 9.5104343 | 9.5345040 |
| 55 | 32419.26 | 34270.15 | 105709.24 | 9.5108031 | 9.5349161 |
| 56 | 32446.78 | 34302.66 | 105719.78 | 9.5111716 | 9.5353278 |
| 57 | 32474.29 | 34335.18 | 105730.34 | 9.5115397 | 9.5357393 |
| 58 | 32501.80 | 34367.70 | 105740.90 | 9.5119074 | 9.5361505 |
| 59 | 32529.31 | 34400.23 | 105751.48 | 9.5122749 | 9.5365613 |
| 60 | 32556.82 | 34432.76 | 105762.07 | 9.5126419 | 9.5369719 |

# 71 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 94832.36 | 298868.50 | 315154.53 | 9.9769566 | 10.4754801 |
| 29 | 94823.13 | 298579.83 | 314880.79 | 9.9769143 | 10.4750605 |
| 28 | 94813.89 | 298291.66 | 314607.56 | 9.9768720 | 10.4746411 |
| 27 | 94804.64 | 298004.00 | 314334.83 | 9.9768296 | 10.4742221 |
| 26 | 94795.38 | 297716.83 | 314062.59 | 9.9767872 | 10.4738034 |
| 25 | 94786.11 | 297430.16 | 313790.86 | 9.9767447 | 10.4733850 |
| 24 | 94776.84 | 297143.99 | 313519.62 | 9.9767022 | 10.4729669 |
| 23 | 94767.56 | 296858.31 | 313248.87 | 9.9766597 | 10.4725492 |
| 22 | 94758.27 | 296573.12 | 312978.62 | 9.9766171 | 10.4721318 |
| 21 | 94748.97 | 296288.42 | 312708.86 | 9.9765745 | 10.4717147 |
| 20 | 94739.66 | 296004.22 | 312439.59 | 9.9765318 | 10.4712979 |
| 19 | 94730.35 | 295720.50 | 312170.81 | 9.9764891 | 10.4708814 |
| 18 | 94721.03 | 295437.27 | 311902.52 | 9.9764464 | 10.4704653 |
| 17 | 94711.70 | 295154.53 | 311634.72 | 9.9764036 | 10.4700495 |
| 16 | 94702.36 | 294872.27 | 311367.40 | 9.9763608 | 10.4696339 |
| 15 | 94693.01 | 294590.50 | 311100.57 | 9.9763179 | 10.4692187 |
| 14 | 94683.66 | 294309.21 | 310834.22 | 9.9762750 | 10.4688039 |
| 13 | 94674.30 | 294028.40 | 310568.35 | 9.9762321 | 10.4683893 |
| 12 | 94664.93 | 293748.07 | 310302.96 | 9.9761891 | 10.4679750 |
| 11 | 94655.55 | 293468.22 | 310038.05 | 9.9761461 | 10.4675611 |
| 10 | 94646.16 | 293188.85 | 309773.63 | 9.9761030 | 10.4671474 |
| 9 | 94636.76 | 292909.95 | 309509.67 | 9.9760599 | 10.4667341 |
| 8 | 94627.36 | 292631.52 | 309246.20 | 9.9760167 | 10.4663211 |
| 7 | 94617.95 | 292353.58 | 308983.19 | 9.9759736 | 10.4659084 |
| 6 | 94608.53 | 292076.10 | 308720.66 | 9.9759303 | 10.4654960 |
| 5 | 94599.10 | 291799.09 | 308458.60 | 9.9758870 | 10.4650839 |
| 4 | 94589.67 | 291522.56 | 308197.02 | 9.9758437 | 10.4646722 |
| 3 | 94580.23 | 291246.49 | 307935.90 | 9.9758004 | 10.4642607 |
| 2 | 94570.78 | 290970.89 | 307675.25 | 9.9757570 | 10.4638495 |
| 1 | 94561.32 | 290695.76 | 307415.07 | 9.9757135 | 10.4634387 |
| 0 | 94551.85 | 290421.09 | 307155.35 | 9.9756701 | 10.4630281 |

## 19 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 32556.82 | 34432.76 | 105762.07 | 9.5126419 | 9.5369719 |
| 1 | 32584.32 | 34465.30 | 105772.67 | 9.5130086 | 9.5373821 |
| 2 | 32611.82 | 34497.85 | 105783.28 | 9.5133750 | 9.5377920 |
| 3 | 32639.31 | 34530.40 | 105793.90 | 9.5137410 | 9.5382017 |
| 4 | 32666.81 | 34562.96 | 105804.53 | 9.5141067 | 9.5386110 |
| 5 | 32694.30 | 34595.53 | 105815.17 | 9.5144721 | 9.5390200 |
| 6 | 32721.79 | 34628.10 | 105825.83 | 9.5148371 | 9.5394287 |
| 7 | 32749.28 | 34660.68 | 105836.49 | 9.5152017 | 9.5398371 |
| 8 | 32776.76 | 34693.27 | 105847.17 | 9.5155660 | 9.5402453 |
| 9 | 32804.24 | 34725.86 | 105857.86 | 9.5159300 | 9.5406531 |
| 10 | 32831.72 | 34758.46 | 105868.55 | 9.5162936 | 9.5410606 |
| 11 | 32859.19 | 34791.07 | 105879.26 | 9.5166569 | 9.5414678 |
| 12 | 32886.66 | 34823.68 | 105889.99 | 9.5170198 | 9.5418747 |
| 13 | 32914.13 | 34856.30 | 105900.72 | 9.5173824 | 9.5422813 |
| 14 | 32941.60 | 34888.93 | 105911.46 | 9.5177447 | 9.5426877 |
| 15 | 32969.06 | 34921.56 | 105922.21 | 9.5181066 | 9.5430937 |
| 16 | 32996.52 | 34954.20 | 105932.98 | 9.5184682 | 9.5434994 |
| 17 | 33023.98 | 34986.85 | 105943.76 | 9.5188295 | 9.5439048 |
| 18 | 33051.44 | 35019.50 | 105954.54 | 9.5191904 | 9.5443100 |
| 19 | 33078.89 | 35052.16 | 105965.34 | 9.5195510 | 9.5447148 |
| 20 | 33106.34 | 35084.83 | 105976.15 | 9.5199112 | 9.5451193 |
| 21 | 33133.79 | 35117.50 | 105986.97 | 9.5202711 | 9.5455236 |
| 22 | 33161.23 | 35150.18 | 105997.81 | 9.5206307 | 9.5459276 |
| 23 | 33188.67 | 35182.87 | 106008.65 | 9.5209899 | 9.5463312 |
| 24 | 33216.11 | 35215.56 | 106019.51 | 9.5213488 | 9.5467346 |
| 25 | 33243.55 | 35248.26 | 106030.37 | 9.5217074 | 9.5471377 |
| 26 | 33270.98 | 35280.97 | 106041.25 | 9.5220656 | 9.5475405 |
| 27 | 33298.41 | 35313.68 | 106052.14 | 9.5224235 | 9.5479430 |
| 28 | 33325.84 | 35346.40 | 106063.04 | 9.5227811 | 9.5483452 |
| 29 | 33353.27 | 35379.13 | 106073.95 | 9.5231383 | 9.5487471 |
| 30 | 33380.69 | 35411.86 | 106084.87 | 9.5234953 | 9.5491487 |

# 70 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 94551.85 | 290421.09 | 307155.35 | 9.9756701 | 10.4630281 |
| 59 | 94542.38 | 290146.88 | 306896.10 | 9.9756265 | 10.4626179 |
| 58 | 94532.90 | 289873.14 | 306637.31 | 9.9755830 | 10.4622080 |
| 57 | 94523.41 | 289599.86 | 306378.98 | 9.9755394 | 10.4617983 |
| 56 | 94513.91 | 289327.04 | 306121.11 | 9.9754957 | 10.4613890 |
| 55 | 94504.40 | 289054.67 | 305863.70 | 9.9754521 | 10.4609800 |
| 54 | 94494.89 | 288782.77 | 305606.75 | 9.9754083 | 10.4605713 |
| 53 | 94485.37 | 288511.32 | 305350.26 | 9.9753646 | 10.4601629 |
| 52 | 94475.84 | 288240.33 | 305094.23 | 9.9753208 | 10.4597547 |
| 51 | 94466.30 | 287969.79 | 304838.64 | 9.9752769 | 10.4593469 |
| 50 | 94456.75 | 287699.70 | 304583.52 | 9.9752330 | 10.4589394 |
| 49 | 94447.20 | 287430.07 | 304328.84 | 9.9751891 | 10.4585322 |
| 48 | 94437.64 | 287160.88 | 304074.62 | 9.9751451 | 10.4581253 |
| 47 | 94428.07 | 286892.15 | 303820.84 | 9.9751011 | 10.4577187 |
| 46 | 94418.49 | 286623.86 | 303567.52 | 9.9750570 | 10.4573123 |
| 45 | 94408.90 | 286356.02 | 303314.64 | 9.9750129 | 10.4569063 |
| 44 | 94399.31 | 286088.63 | 303062.21 | 9.9749688 | 10.4565006 |
| 43 | 94389.71 | 285821.68 | 302810.23 | 9.9749246 | 10.4560952 |
| 42 | 94380.10 | 285555.17 | 302558.68 | 9.9748804 | 10.4556900 |
| 41 | 94370.48 | 285289.11 | 302307.59 | 9.9748361 | 10.4552852 |
| 40 | 94360.85 | 285023.49 | 302056.93 | 9.9747918 | 10.4548807 |
| 39 | 94351.21 | 284758.31 | 301806.72 | 9.9747475 | 10.4544764 |
| 38 | 94341.57 | 284493.56 | 301556.94 | 9.9747031 | 10.4540724 |
| 37 | 94331.92 | 284229.26 | 301307.60 | 9.9746587 | 10.4536688 |
| 36 | 94322.26 | 283965.39 | 301058.70 | 9.9746142 | 10.4532654 |
| 35 | 94312.60 | 283701.96 | 300810.24 | 9.9745697 | 10.4528623 |
| 34 | 94302.93 | 283438.96 | 300562.21 | 9.9745252 | 10.4524595 |
| 33 | 94293.25 | 283176.39 | 300314.62 | 9.9744806 | 10.4520570 |
| 32 | 94283.56 | 282914.26 | 300067.46 | 9.9744359 | 10.4516548 |
| 31 | 94273.86 | 282652.56 | 299820.73 | 9.9743913 | 10.4512529 |
| 30 | 94264.15 | 282391.29 | 299574.43 | 9.9743466 | 10.4508513 |

## 19 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 33380.69 | 35411.86 | 106084.87 | 9.5234953 | 9.5491487 |
| 31 | 33408.10 | 35444.60 | 106095.80 | 9.5238518 | 9.5495500 |
| 32 | 33435.52 | 35477.35 | 106106.75 | 9.5242081 | 9.5499511 |
| 33 | 33462.93 | 35510.10 | 106117.70 | 9.5245640 | 9.5503519 |
| 34 | 33490.34 | 35542.86 | 106128.67 | 9.5249196 | 9.5507523 |
| 35 | 33517.75 | 35575.63 | 106139.65 | 9.5252749 | 9.5511525 |
| 36 | 33545.16 | 35608.40 | 106150.64 | 9.5256298 | 9.5515524 |
| 37 | 33572.56 | 35641.18 | 106161.64 | 9.5259844 | 9.5519521 |
| 38 | 33599.96 | 35673.97 | 106172.65 | 9.5263387 | 9.5523514 |
| 39 | 33627.35 | 35706.76 | 106183.67 | 9.5266927 | 9.5527504 |
| 40 | 33654.75 | 35739.56 | 106194.71 | 9.5270463 | 9.5531492 |
| 41 | 33682.14 | 35772.37 | 106205.75 | 9.5273997 | 9.5535477 |
| 42 | 33709.53 | 35805.18 | 106216.81 | 9.5277526 | 9.5539459 |
| 43 | 33736.91 | 35838.00 | 106227.88 | 9.5281053 | 9.5543438 |
| 44 | 33764.29 | 35870.83 | 106238.96 | 9.5284577 | 9.5547415 |
| 45 | 33791.67 | 35903.67 | 106250.05 | 9.5288097 | 9.5551388 |
| 46 | 33819.05 | 35936.51 | 106261.15 | 9.5291614 | 9.5555359 |
| 47 | 33846.42 | 35969.36 | 106272.27 | 9.5295128 | 9.5559327 |
| 48 | 33873.79 | 36002.22 | 106283.39 | 9.5298638 | 9.5563292 |
| 49 | 33901.16 | 36035.08 | 106294.53 | 9.5302146 | 9.5567255 |
| 50 | 33928.53 | 36067.95 | 106305.68 | 9.5305650 | 9.5571214 |
| 51 | 33955.89 | 36100.83 | 106316.84 | 9.5309151 | 9.5575171 |
| 52 | 33983.25 | 36133.71 | 106328.01 | 9.5312649 | 9.5579125 |
| 53 | 34010.60 | 36166.60 | 106339.19 | 9.5316143 | 9.5583077 |
| 54 | 34037.95 | 36199.50 | 106350.38 | 9.5319635 | 9.5587025 |
| 55 | 34065.30 | 36232.40 | 106361.58 | 9.5323123 | 9.5590971 |
| 56 | 34092.65 | 36265.31 | 106372.80 | 9.5326608 | 9.5594914 |
| 57 | 34120.00 | 36298.23 | 106384.03 | 9.5330090 | 9.5598854 |
| 58 | 34147.34 | 36331.15 | 106395.27 | 9.5333569 | 9.5602792 |
| 59 | 34174.68 | 36364.08 | 106406.52 | 9.5337044 | 9.5606727 |
| 60 | 34202.02 | 36397.02 | 106417.78 | 9.5340517 | 9.5610659 |

# 70 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 94264.15 | 282391.29 | 299574.43 | 9.9743466 | 10.4508513 |
| 29 | 94254.43 | 282130.45 | 299328.56 | 9.9743018 | 10.4504500 |
| 28 | 94244.71 | 281870.03 | 299083.12 | 9.9742570 | 10.4500489 |
| 27 | 94234.98 | 281610.04 | 298838.11 | 9.9742122 | 10.4496481 |
| 26 | 94225.24 | 281350.48 | 298593.52 | 9.9741673 | 10.4492477 |
| 25 | 94215.50 | 281091.34 | 298359.36 | 9.9741224 | 10.4488475 |
| 24 | 94205.75 | 280832.63 | 298105.63 | 9.9740774 | 10.4484476 |
| 23 | 94195.99 | 280574.33 | 297862.31 | 9.9740324 | 10.4480479 |
| 22 | 94186.22 | 280316.46 | 297619.42 | 9.9739873 | 10.4476486 |
| 21 | 94176.44 | 280059.01 | 297376.95 | 9.9739422 | 10.4472496 |
| 20 | 94166.65 | 279801.98 | 297134.90 | 9.9738971 | 10.4468508 |
| 19 | 94156.85 | 279545.37 | 296893.27 | 9.9738519 | 10.4464523 |
| 18 | 94147.05 | 279289.17 | 296652.05 | 9.9738067 | 10.4460541 |
| 17 | 94137.24 | 279033.39 | 296411.25 | 9.9737615 | 10.4456562 |
| 16 | 94127.42 | 278778.02 | 296170.87 | 9.9737162 | 10.4452585 |
| 15 | 94117.60 | 278523.07 | 295930.90 | 9.9736709 | 10.4448612 |
| 14 | 94107.77 | 278268.53 | 295691.35 | 9.9736255 | 10.4444641 |
| 13 | 94097.93 | 278014.40 | 295452.21 | 9.9735801 | 10.4440673 |
| 12 | 94088.08 | 277760.69 | 295213.48 | 9.9735346 | 10.4436708 |
| 11 | 94078.22 | 277507.38 | 294975.16 | 9.9734891 | 10.4432745 |
| 10 | 94068.35 | 277254.48 | 294737.25 | 9.9734435 | 10.4428786 |
| 9 | 94058.48 | 277001.99 | 294499.75 | 9.9733980 | 10.4424829 |
| 8 | 94048.60 | 276749.90 | 294262.65 | 9.9733523 | 10.4420875 |
| 7 | 94038.71 | 276498.22 | 294025.97 | 9.9733067 | 10.4416923 |
| 6 | 94028.81 | 276246.95 | 293789.68 | 9.9732610 | 10.4412975 |
| 5 | 94018.90 | 275996.08 | 293553.80 | 9.9732152 | 10.4409029 |
| 4 | 94008.99 | 275745.61 | 293318.33 | 9.9731694 | 10.4405086 |
| 3 | 93999.07 | 275495.54 | 293083.26 | 9.9731236 | 10.4401146 |
| 2 | 93989.14 | 275245.88 | 292848.58 | 9.9730777 | 10.4397208 |
| 1 | 93979.20 | 274996.61 | 292614.31 | 9.9730318 | 10.4393273 |
| 0 | 93969.26 | 274747.74 | 292380.44 | 9.9729858 | 10.4389341 |

# 20 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 34202.02 | 36397.02 | 106417.78 | 9.5340517 | 9.5610658 |
| 1 | 34229.35 | 36429.97 | 106429.05 | 9.5343986 | 9.5614588 |
| 2 | 34256.68 | 36462.92 | 106440.33 | 9.5347452 | 9.5618515 |
| 3 | 34284.01 | 36495.88 | 106451.63 | 9.5350915 | 9.5622439 |
| 4 | 34311.33 | 36528.85 | 106462.94 | 9.5354375 | 9.5626360 |
| 5 | 34338.65 | 36561.82 | 106474.26 | 9.5357832 | 9.5630278 |
| 6 | 34365.97 | 36594.80 | 106485.59 | 9.5361286 | 9.5634194 |
| 7 | 34393.29 | 36627.79 | 106496.93 | 9.5364737 | 9.5638107 |
| 8 | 34420.60 | 36660.79 | 106508.28 | 9.5368184 | 9.5642018 |
| 9 | 34447.91 | 36693.79 | 106519.64 | 9.5371628 | 9.5645925 |
| 10 | 34475.22 | 36726.80 | 106531.01 | 9.5375069 | 9.5649831 |
| 11 | 34502.52 | 36759.82 | 106542.40 | 9.5378508 | 9.5653733 |
| 12 | 34529.82 | 36792.84 | 106553.80 | 9.5381943 | 9.5657633 |
| 13 | 34557.12 | 36825.87 | 106565.21 | 9.5385375 | 9.5661530 |
| 14 | 34584.42 | 36858.91 | 106576.63 | 9.5388804 | 9.5665424 |
| 15 | 34611.71 | 36891.95 | 106588.07 | 9.5392230 | 9.5669316 |
| 16 | 34639.00 | 36925.00 | 106599.51 | 9.5395653 | 9.5673205 |
| 17 | 34666.29 | 36958.06 | 106610.97 | 9.5399073 | 9.5677091 |
| 18 | 34693.57 | 36991.13 | 106622.43 | 9.5402489 | 9.5680975 |
| 19 | 34720.85 | 37024.20 | 106633.91 | 9.5405903 | 9.5684856 |
| 20 | 34748.13 | 37057.28 | 106645.40 | 9.5409314 | 9.5688735 |
| 21 | 34775.40 | 37090.37 | 106656.90 | 9.5412721 | 9.5692611 |
| 22 | 34802.67 | 37123.46 | 106668.42 | 9.5416126 | 9.5696484 |
| 23 | 34829.94 | 37156.56 | 106679.94 | 9.5419527 | 9.5700355 |
| 24 | 34857.21 | 37189.67 | 106691.48 | 9.5422926 | 9.5704223 |
| 25 | 34884.47 | 37222.78 | 106703.02 | 9.5426321 | 9.5708088 |
| 26 | 34911.73 | 37255.90 | 106714.58 | 9.5429713 | 9.5711951 |
| 27 | 34938.99 | 37289.03 | 106726.15 | 9.5433103 | 9.5715811 |
| 28 | 34966.24 | 37322.17 | 106737.74 | 9.5436489 | 9.5719669 |
| 29 | 34993.49 | 37355.32 | 106749.34 | 9.5439873 | 9.5723524 |
| 30 | 35020.74 | 37388.47 | 106760.94 | 9.5443253 | 9.5727377 |

# 69 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 93969.25 | 274747.74 | 292380.44 | 9.9729858 | 10.4389341 |
| 59 | 93959.31 | 274499.27 | 292146.97 | 9.9729398 | 10.4385412 |
| 58 | 93949.35 | 274251.20 | 291913.89 | 9.9728938 | 10.4381485 |
| 57 | 93939.38 | 274003.52 | 291681.21 | 9.9728477 | 10.4377561 |
| 56 | 93929.40 | 273756.23 | 291448.92 | 9.9728016 | 10.4373640 |
| 55 | 93919.42 | 273509.34 | 291217.03 | 9.9727554 | 10.4369722 |
| 54 | 93909.43 | 273262.84 | 290985.53 | 9.9727092 | 10.4365806 |
| 53 | 93899.43 | 273016.74 | 290754.43 | 9.9726629 | 10.4361893 |
| 52 | 93889.42 | 272771.02 | 290523.72 | 9.9726166 | 10.4357982 |
| 51 | 93879.40 | 272525.69 | 290293.39 | 9.9725703 | 10.4354075 |
| 50 | 93869.37 | 272280.75 | 290063.46 | 9.9725239 | 10.4350169 |
| 49 | 93859.34 | 272036.20 | 289833.91 | 9.9724775 | 10.4346267 |
| 48 | 93849.30 | 271792.04 | 289604.75 | 9.9724310 | 10.4342367 |
| 47 | 93839.25 | 271548.26 | 289375.98 | 9.9723845 | 10.4338470 |
| 46 | 93829.19 | 271304.87 | 289147.60 | 9.9723380 | 10.4334576 |
| 45 | 93819.13 | 271061.86 | 288919.59 | 9.9722914 | 10.4330684 |
| 44 | 93809.06 | 270819.23 | 288691.98 | 9.9722448 | 10.4326795 |
| 43 | 93798.98 | 270576.99 | 288464.74 | 9.9721981 | 10.4322909 |
| 42 | 93788.89 | 270335.13 | 288237.89 | 9.9721514 | 10.4319025 |
| 41 | 93778.79 | 270093.64 | 288011.42 | 9.9721047 | 10.4315144 |
| 40 | 93768.69 | 269852.54 | 287785.32 | 9.9720579 | 10.4311265 |
| 39 | 93758.58 | 269611.81 | 287559.61 | 9.9720110 | 10.4307389 |
| 38 | 93748.46 | 269371.47 | 287334.28 | 9.9719642 | 10.4303516 |
| 37 | 93738.33 | 269131.49 | 287109.32 | 9.9719172 | 10.4299645 |
| 36 | 93728.19 | 268891.90 | 286884.74 | 9.9718703 | 10.4295777 |
| 35 | 93718.05 | 268652.67 | 286660.53 | 9.9718233 | 10.4291912 |
| 34 | 93707.90 | 268413.83 | 286436.70 | 9.9717762 | 10.4288049 |
| 33 | 93697.74 | 268175.35 | 286213.24 | 9.9717291 | 10.4284189 |
| 32 | 93687.57 | 267937.25 | 285990.15 | 9.9716820 | 10.4280331 |
| 31 | 93677.40 | 267699.51 | 285767.44 | 9.9716348 | 10.4276476 |
| 30 | 93667.22 | 267462.15 | 285545.09 | 9.9715876 | 10.4272623 |

# 20 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 34202.02 | 36397.02 | 106417.78 | 9.5340517 | 9.5610658 |
| 1 | 34229.35 | 36429.97 | 106429.05 | 9.5343986 | 9.5614588 |
| 2 | 34256.68 | 36462.92 | 106440.33 | 9.5347452 | 9.5618515 |
| 3 | 34284.01 | 36495.88 | 106451.63 | 9.5350915 | 9.5622439 |
| 4 | 34311.33 | 36528.85 | 106462.94 | 9.5354375 | 9.5626360 |
| 5 | 34338.65 | 36561.82 | 106474.26 | 9.5357832 | 9.5630278 |
| 6 | 34365.97 | 36594.80 | 106485.59 | 9.5361286 | 9.5634194 |
| 7 | 34393.29 | 36627.79 | 106496.93 | 9.5364737 | 9.5638107 |
| 8 | 34420.60 | 36660.79 | 106508.28 | 9.5368184 | 9.5642018 |
| 9 | 34447.91 | 36693.79 | 106519.64 | 9.5371628 | 9.5645925 |
| 10 | 34475.22 | 36726.80 | 106531.01 | 9.5375069 | 9.5649831 |
| 11 | 34502.52 | 36759.82 | 106542.40 | 9.5378508 | 9.5653733 |
| 12 | 34529.82 | 36792.84 | 106553.80 | 9.5381943 | 9.5657633 |
| 13 | 34557.12 | 36825.87 | 106565.21 | 9.5385375 | 9.5661530 |
| 14 | 34584.42 | 36858.91 | 106576.63 | 9.5388804 | 9.5665424 |
| 15 | 34611.71 | 36891.95 | 106588.07 | 9.5392230 | 9.5669316 |
| 16 | 34639.00 | 36925.00 | 106599.51 | 9.5395653 | 9.5673205 |
| 17 | 34666.29 | 36958.06 | 106610.97 | 9.5399073 | 9.5677091 |
| 18 | 34693.57 | 36991.13 | 106622.43 | 9.5402489 | 9.5680975 |
| 19 | 34720.85 | 37024.20 | 106633.91 | 9.5405903 | 9.5684856 |
| 20 | 34748.13 | 37057.28 | 106645.40 | 9.5409314 | 9.5688735 |
| 21 | 34775.40 | 37090.37 | 106656.90 | 9.5412721 | 9.5692611 |
| 22 | 34802.67 | 37123.46 | 106668.42 | 9.5416126 | 9.5696484 |
| 23 | 34829.94 | 37156.56 | 106679.94 | 9.5419527 | 9.5700355 |
| 24 | 34857.21 | 37189.67 | 106691.48 | 9.5422926 | 9.5704223 |
| 25 | 34884.47 | 37222.78 | 106703.02 | 9.5426321 | 9.5708088 |
| 26 | 34911.73 | 37255.90 | 106714.58 | 9.5429713 | 9.5711951 |
| 27 | 34938.99 | 37289.03 | 106726.15 | 9.5433103 | 9.5715811 |
| 28 | 34966.24 | 37322.17 | 106737.74 | 9.5436489 | 9.5719669 |
| 29 | 34993.49 | 37355.32 | 106749.34 | 9.5439873 | 9.5723524 |
| 30 | 35020.74 | 37388.47 | 106760.94 | 9.5443253 | 9.5727377 |

# 69 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 93969.25 | 274747.74 | 292380.44 | 9.9729858 | 10.4389341 |
| 59 | 93959.31 | 274499.27 | 292146.97 | 9.9729398 | 10.4385412 |
| 58 | 93949.35 | 274251.20 | 291913.89 | 9.9728938 | 10.4381485 |
| 57 | 93939.38 | 274003.52 | 291681.21 | 9.9728477 | 10.4377561 |
| 56 | 93929.40 | 273756.23 | 291448.92 | 9.9728016 | 10.4373640 |
| 55 | 93919.42 | 273509.34 | 291217.03 | 9.9727554 | 10.4369722 |
| 54 | 93909.43 | 273262.84 | 290985.53 | 9.9727092 | 10.4365806 |
| 53 | 93899.43 | 273016.74 | 290754.43 | 9.9726629 | 10.4361893 |
| 52 | 93889.42 | 272771.02 | 290523.72 | 9.9726166 | 10.4357982 |
| 51 | 93879.40 | 272525.69 | 290293.39 | 9.9725703 | 10.4354075 |
| 50 | 93869.37 | 272280.75 | 290063.46 | 9.9725239 | 10.4350169 |
| 49 | 93859.34 | 272036.20 | 289833.91 | 9.9724775 | 10.4346267 |
| 48 | 93849.30 | 271792.04 | 289604.75 | 9.9724310 | 10.4342367 |
| 47 | 93839.25 | 271548.26 | 289375.98 | 9.9723845 | 10.4338470 |
| 46 | 93829.19 | 271304.87 | 289147.60 | 9.9723380 | 10.4334576 |
| 45 | 93819.13 | 271061.86 | 288919.59 | 9.9722914 | 10.4330684 |
| 44 | 93809.06 | 270819.23 | 288691.98 | 9.9722448 | 10.4326795 |
| 43 | 93798.98 | 270576.99 | 288464.74 | 9.9721981 | 10.4322909 |
| 42 | 93788.89 | 270335.13 | 288237.89 | 9.9721514 | 10.4319025 |
| 41 | 93778.79 | 270093.64 | 288011.42 | 9.9721047 | 10.4315144 |
| 40 | 93768.69 | 269852.54 | 287785.32 | 9.9720579 | 10.4311265 |
| 39 | 93758.58 | 269611.81 | 287559.61 | 9.9720110 | 10.4307389 |
| 38 | 93748.46 | 269371.47 | 287334.28 | 9.9719642 | 10.4303516 |
| 37 | 93738.33 | 269131.49 | 287109.32 | 9.9719172 | 10.4299645 |
| 36 | 93728.19 | 268891.90 | 286884.74 | 9.9718703 | 10.4295777 |
| 35 | 93718.05 | 268652.67 | 286660.53 | 9.9718233 | 10.4291912 |
| 34 | 93707.90 | 268413.83 | 286436.70 | 9.9717762 | 10.4288049 |
| 33 | 93697.74 | 268175.35 | 286213.24 | 9.9717291 | 10.4284189 |
| 32 | 93687.57 | 267937.25 | 285990.15 | 9.9716820 | 10.4280331 |
| 31 | 93677.40 | 267699.51 | 285767.44 | 9.9716348 | 10.4276476 |
| 30 | 93667.22 | 267462.15 | 285545.09 | 9.9715876 | 10.4272623 |

## 20 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 35020.74 | 37388.47 | 106760.94 | 9.5443253 | 9.5727377 |
| 31 | 35047.99 | 37421.63 | 106772.55 | 9.5446630 | 9.5731227 |
| 32 | 35075.23 | 37454.79 | 106784.18 | 9.5450005 | 9.5735074 |
| 33 | 35102.47 | 37487.97 | 106795.82 | 9.5453376 | 9.5738919 |
| 34 | 35129.70 | 37521.15 | 106807.47 | 9.5456745 | 9.5742761 |
| 35 | 35156.93 | 37554.34 | 106819.14 | 9.5460110 | 9.5746601 |
| 36 | 35184.16 | 37587.53 | 106830.81 | 9.5463472 | 9.5750438 |
| 37 | 35211.39 | 37620.73 | 106842.50 | 9.5466832 | 9.5754272 |
| 38 | 35238.62 | 37653.94 | 106854.20 | 9.5470189 | 9.5758104 |
| 39 | 35265.84 | 37687.16 | 106865.91 | 9.5473542 | 9.5761934 |
| 40 | 35293.06 | 37720.38 | 106877.63 | 9.5476893 | 9.5765761 |
| 41 | 35320.27 | 37753.61 | 106889.36 | 9.5480240 | 9.5769585 |
| 42 | 35347.48 | 37786.85 | 106901.10 | 9.5483585 | 9.5773407 |
| 43 | 35374.69 | 37820.10 | 106912.86 | 9.5486927 | 9.5777226 |
| 44 | 35401.90 | 37853.35 | 106924.63 | 9.5490266 | 9.5781043 |
| 45 | 35429.10 | 37886.61 | 106936.41 | 9.5493602 | 9.5784858 |
| 46 | 35456.30 | 37919.88 | 106948.20 | 9.5496935 | 9.5788669 |
| 47 | 35483.50 | 37953.16 | 106960.00 | 9.5500265 | 9.5792479 |
| 48 | 35510.70 | 37986.44 | 106971.82 | 9.5503592 | 9.5796286 |
| 49 | 35537.89 | 38019.73 | 106983.64 | 9.5506916 | 9.5800090 |
| 50 | 35565.08 | 38053.03 | 106995.48 | 9.5510237 | 9.5803892 |
| 51 | 35592.26 | 38086.33 | 107007.33 | 9.5513556 | 9.5807691 |
| 52 | 35619.44 | 38119.64 | 107019.19 | 9.5516871 | 9.5811488 |
| 53 | 35646.62 | 38152.96 | 107031.06 | 9.5520184 | 9.5815282 |
| 54 | 35673.80 | 38186.29 | 107042.95 | 9.5523494 | 9.5819074 |
| 55 | 35700.97 | 38219.62 | 107054.84 | 9.5526801 | 9.5822864 |
| 56 | 35728.14 | 38252.96 | 107066.75 | 9.5530105 | 9.5826651 |
| 57 | 35755.31 | 38286.31 | 107078.67 | 9.5533406 | 9.5830435 |
| 58 | 35782.48 | 38319.67 | 107090.60 | 9.5536704 | 9.5834217 |
| 59 | 35809.64 | 38353.03 | 107102.54 | 9.5539999 | 9.5837997 |
| 60 | 35836.79 | 38386.40 | 107114.50 | 9.5543292 | 9.5841774 |

## 69 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 93667.22 | 267462.15 | 285545.09 | 9.9715876 | 10.4272623 |
| 29 | 93657.03 | 267225.16 | 285323.12 | 9.9715404 | 10.4268773 |
| 28 | 93646.83 | 266988.53 | 285101.52 | 9.9714931 | 10.4264926 |
| 27 | 93636.62 | 266752.27 | 284880.28 | 9.9714457 | 10.4261081 |
| 26 | 93626.40 | 266516.38 | 284659.41 | 9.9713984 | 10.4257239 |
| 25 | 93616.18 | 266280.85 | 284438.91 | 9.9713509 | 10.4253399 |
| 24 | 93605.95 | 266045.69 | 284218.77 | 9.9713035 | 10.4249562 |
| 23 | 93595.71 | 265810.89 | 283998.99 | 9.9712560 | 10.4245728 |
| 22 | 93585.46 | 265576.45 | 283779.58 | 9.9712084 | 10.4241896 |
| 21 | 93575.21 | 265342.38 | 283560.54 | 9.9711608 | 10.4238066 |
| 20 | 93564.95 | 265108.67 | 283341.85 | 9.9711132 | 10.4234239 |
| 19 | 93554.68 | 264875.31 | 283123.53 | 9.9710655 | 10.4230415 |
| 18 | 93544.40 | 264642.32 | 282905.56 | 9.9710178 | 10.4226593 |
| 17 | 93534.11 | 264409.69 | 282687.96 | 9.9709701 | 10.4222774 |
| 16 | 93523.82 | 264177.41 | 282470.71 | 9.9709223 | 10.4218957 |
| 15 | 93513.52 | 263945.49 | 282253.82 | 9.9708744 | 10.4215142 |
| 14 | 93503.21 | 263713.92 | 282037.29 | 9.9708265 | 10.4211331 |
| 13 | 93492.89 | 263482.71 | 281821.11 | 9.9707786 | 10.4207521 |
| 12 | 93482.56 | 263251.86 | 281605.29 | 9.9707306 | 10.4203714 |
| 11 | 93472.23 | 263021.36 | 281389.82 | 9.9706826 | 10.4199910 |
| 10 | 93461.89 | 262791.21 | 281174.71 | 9.9706346 | 10.4196108 |
| 9 | 93451.54 | 262561.41 | 280959.95 | 9.9705865 | 10.4192309 |
| 8 | 93441.18 | 262331.96 | 280745.54 | 9.9705383 | 10.4188512 |
| 7 | 92430.82 | 262102.86 | 280531.48 | 9.9704902 | 10.4184718 |
| 6 | 93420.45 | 261874.11 | 280317.77 | 9.9704419 | 10.4180926 |
| 5 | 93410.07 | 261645.71 | 280104.41 | 9.9703937 | 10.4177136 |
| 4 | 93399.68 | 261417.66 | 279891.40 | 9.9703454 | 10.4173349 |
| 3 | 93389.28 | 261189.95 | 279678.73 | 9.9702970 | 10.4169565 |
| 2 | 93378.87 | 260962.59 | 279466.41 | 9.9702486 | 10.4165783 |
| 1 | 93368.46 | 260735.58 | 279254.44 | 9.9702002 | 10.4162003 |
| 0 | 93358.04 | 260508.91 | 279042.81 | 9.9701517 | 10.4158226 |

# 21 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin | Log.Tan |
|---|---|---|---|---|---|
| 0 | 35836.79 | 38386.40 | 107114.50 | 9.5543292 | 9.5841774 |
| 1 | 35863.95 | 38419.78 | 107126.47 | 9.5546581 | 9.5845549 |
| 2 | 35891.10 | 38453.17 | 107138.44 | 9.5549868 | 9.5849321 |
| 3 | 35918.25 | 38486.56 | 107150.43 | 9.5553152 | 9.5853091 |
| 4 | 35945.40 | 38519.96 | 107162.44 | 9.5556433 | 9.5856859 |
| 5 | 35972.54 | 38553.37 | 107174.45 | 9.5559711 | 9.5860624 |
| 6 | 35999.68 | 38586.79 | 107186.47 | 9.5562987 | 9.5864386 |
| 7 | 36026.82 | 38620.21 | 107198.51 | 9.5566259 | 9.5868147 |
| 8 | 36053.95 | 38653.64 | 107210.56 | 9.5569529 | 9.5871904 |
| 9 | 36081.08 | 38687.08 | 107222.62 | 9.5572796 | 9.5875660 |
| 10 | 36108. 1 | 38720.53 | 107234.69 | 9.5576060 | 9.5879413 |
| 11 | 36135.33 | 38753.98 | 107246.78 | 9.5579321 | 9.5883163 |
| 12 | 36162.46 | 38787.44 | 107258.87 | 9.5582579 | 9.5886912 |
| 13 | 36189.58 | 38820.91 | 107270.98 | 9.5585835 | 9.5890657 |
| 14 | 36216.69 | 38854.39 | 107283.10 | 9.5589088 | 9.5894401 |
| 15 | 36243.80 | 38887.87 | 107295.23 | 9.5592338 | 9.5898142 |
| 16 | 36270.91 | 38921.36 | 107307.37 | 9.5595585 | 9.5901881 |
| 17 | 36298.02 | 38954.86 | 107319.53 | 9.5598829 | 9.5905617 |
| 18 | 36325.12 | 38988.37 | 107331.70 | 9.5602071 | 9.5909351 |
| 19 | 36352.22 | 39021.89 | 107343.88 | 9.5605310 | 9.5913082 |
| 20 | 36379.32 | 39055.41 | 107356.07 | 9.5608546 | 9.5916812 |
| 21 | 36406.41 | 39088.94 | 107368.27 | 9.5611779 | 9.5920539 |
| 22 | 36433.50 | 39122.48 | 107380.48 | 9.5615010 | 9.5924263 |
| 23 | 36460.59 | 39156.02 | 107392.71 | 9.5618237 | 9.5927985 |
| 24 | 36487.68 | 39189.57 | 107404.95 | 9.5621462 | 9.5931705 |
| 25 | 36514.76 | 39223.13 | 107417.20 | 9.5624685 | 9.5935422 |
| 26 | 36541.84 | 39256.70 | 107429.46 | 9.5627904 | 9.5939138 |
| 27 | 36568.92 | 39290.28 | 107441.73 | 9.5631121 | 9.5942851 |
| 28 | 36595.99 | 39323.86 | 107454.02 | 9.5634335 | 9.5946561 |
| 29 | 36623.06 | 39357.45 | 107466.31 | 9.5637546 | 9.5950269 |
| 30 | 36650.13 | 39391.05 | 107478.62 | 9.5640754 | 9.5953975 |

# 68 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 93358.04 | 2-050 91 | 279042.81 | 9.9701517 | 10.4158226 |
| 59 | 93347.61 | 260282.58 | 278831.53 | 9.9701032 | 10.4154451 |
| 58 | 93337.17 | 260056.59 | 278620.59 | 9.9700547 | 10.4150679 |
| 57 | 93326.73 | 259830.95 | 278409.99 | 9.9700061 | 10.4146909 |
| 56 | 93316.28 | 259605.64 | 278199.73 | 9.9699574 | 10.4143141 |
| 55 | 93305.82 | 259380.68 | 277989.82 | 9.9699087 | 10.4139376 |
| 54 | 93295.35 | 259156.06 | 277780.24 | 9.9698600 | 10.4135614 |
| 53 | 93284.87 | 258931.77 | 277571.00 | 9.9698112 | 10.4131853 |
| 52 | 93274.39 | 258707.82 | 277362.11 | 9.9697624 | 10.4128096 |
| 51 | 93263.90 | 258484.21 | 277153.55 | 9.9697136 | 10.4124340 |
| 50 | 93253.40 | 258260.94 | 276945.32 | 9.9696647 | 10.4120587 |
| 49 | 93242.89 | 258038.00 | 276737.43 | 9.9696158 | 10.4116837 |
| 48 | 93232.38 | 257815.39 | 276529.88 | 9.9695668 | 10.4113088 |
| 47 | 93221.86 | 257593.12 | 276322.66 | 9.9695177 | 10.4109343 |
| 46 | 93211.33 | 257371.18 | 276115.78 | 9.9694687 | 10.4105599 |
| 45 | 93200.79 | 257149.57 | 275909.23 | 9.9694196 | 10.4101858 |
| 44 | 93190.24 | 256928.30 | 275703.01 | 9.9693704 | 10.4098119 |
| 43 | 93179.68 | 256707.35 | 275497.12 | 9.9693212 | 10.4094383 |
| 42 | 93169.12 | 256486.74 | 275291.57 | 9.9692720 | 10.4090649 |
| 41 | 93158.55 | 256266.45 | 275086.34 | 9.9692227 | 10.4086918 |
| 40 | 93147.97 | 256046.49 | 274881.44 | 9.9691734 | 10.4083188 |
| 39 | 93137.38 | 255826.86 | 274676.87 | 9.9691240 | 10.4079461 |
| 38 | 93126.79 | 255607.56 | 274472.63 | 9.9690746 | 10.4075737 |
| 37 | 93116.19 | 255388.58 | 274268.71 | 9.9690252 | 10.4072015 |
| 36 | 93105.58 | 255169.92 | 274065.12 | 9.9689757 | 10.4068295 |
| 35 | 93094.96 | 254951.60 | 273861.86 | 9.9689262 | 10.4064577 |
| 34 | 93084.33 | 254733.59 | 273658.92 | 9.9688766 | 10.4060862 |
| 33 | 93073.70 | 254515.91 | 273456.30 | 9.9688270 | 10.4057149 |
| 32 | 93063.06 | 254298.55 | 273254.00 | 9.9687773 | 10.4053439 |
| 31 | 93052.41 | 254081.51 | 273052.03 | 9.9687276 | 10.4049731 |
| 30 | 93041.75 | 253864.79 | 272850.38 | 9.9686779 | 10.4046025 |

## 21 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 36650.13 | 39391.05 | 107478.62 | 9.5640754 | 9.5953975 |
| 31 | 36677.19 | 39424.66 | 107490.95 | 9.5643960 | 9.5957679 |
| 32 | 36704.25 | 39458.27 | 107503.28 | 9.5647163 | 9.5961380 |
| 33 | 36731.31 | 39491.89 | 107515.62 | 9.5650363 | 9.5965079 |
| 34 | 36758.36 | 39525.52 | 107527.98 | 9.5653561 | 9.5968776 |
| 35 | 36785.41 | 39559.16 | 107540.35 | 9.5656756 | 9.5972470 |
| 36 | 36812.46 | 39592.80 | 107552.73 | 9.5659948 | 9.5976162 |
| 37 | 36839.50 | 39626.45 | 107565.12 | 9.5663137 | 9.5979852 |
| 38 | 36866.54 | 39660.11 | 107577.53 | 9.5666324 | 9.5983540 |
| 39 | 36893.58 | 39693.78 | 107589.95 | 9.5669508 | 9.5987225 |
| 40 | 36920.62 | 39727.45 | 107602.37 | 9.5672689 | 9.5990908 |
| 41 | 36947.65 | 39761.14 | 107614.81 | 9.5675868 | 9.5994588 |
| 42 | 36974.68 | 39794.83 | 107627.27 | 9.5679044 | 9.5998267 |
| 43 | 37001.70 | 39828.53 | 107639.73 | 9.5682217 | 9.6001943 |
| 44 | 37028.72 | 39862.24 | 107652.21 | 9.5685387 | 9.6005617 |
| 45 | 37055.74 | 39895.96 | 107664.70 | 9.5688555 | 9.6009289 |
| 46 | 37082.76 | 39929.68 | 107677.20 | 9.5691721 | 9.6012958 |
| 47 | 37109.77 | 39963.41 | 107689.71 | 9.5694883 | 9.6016625 |
| 48 | 37136.78 | 39997.15 | 107702.24 | 9.5698043 | 9.6020290 |
| 49 | 37163.79 | 40030.89 | 107714.77 | 9.5701200 | 9.6023953 |
| 50 | 37190.80 | 40064.65 | 107727.32 | 9.5704355 | 9.6027613 |
| 51 | 37217.80 | 40098.41 | 107739.88 | 9.5707506 | 9.6031271 |
| 52 | 37244.80 | 40132.18 | 107752.46 | 9.5710656 | 9.6034927 |
| 53 | 37271.79 | 40165.96 | 107765.04 | 9.5713802 | 9.6038581 |
| 54 | 37298.78 | 40199.75 | 107777.65 | 9.5716946 | 9.6042233 |
| 55 | 37325.77 | 40233.54 | 107790.25 | 9.5720087 | 9.6045882 |
| 56 | 37352.75 | 40267.34 | 107802.87 | 9.5723226 | 9.6049529 |
| 57 | 37379.73 | 40301.15 | 107815.50 | 9.5726362 | 9.6053174 |
| 58 | 37406.71 | 40334.97 | 107828.15 | 9.5729495 | 9.6056817 |
| 59 | 37433.69 | 40368.79 | 107840.80 | 9.5732626 | 9.6060457 |
| 60 | 37460.66 | 40402.62 | 107853.47 | 9.5735754 | 9.6064096 |

# 68 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 93041.75 | 253864.79 | 272850.38 | 9.9686779 | 10.4046025 |
| 29 | 93031.09 | 253648.39 | 272649.05 | 9.9686281 | 10.4042321 |
| 28 | 93020.42 | 253432.31 | 272448.04 | 9.9685783 | 10.4038620 |
| 27 | 93009.74 | 253216.55 | 272247.35 | 9.9685284 | 10.4034921 |
| 26 | 92999.05 | 253001.11 | 272046.98 | 9.9684785 | 10.4031224 |
| 25 | 92988.35 | 252785.98 | 271846.93 | 9.9684286 | 10.4027530 |
| 24 | 92977.65 | 252571.17 | 271647.19 | 9.9683786 | 10.4023838 |
| 23 | 92966.94 | 252356.67 | 271447.77 | 9.9683285 | 10.4020148 |
| 22 | 92956.22 | 252142.49 | 271248.66 | 9.9682784 | 10.4016460 |
| 21 | 92945.49 | 251928.63 | 271049.87 | 9.9682283 | 10.4012775 |
| 20 | 92934.75 | 251715.07 | 270851.39 | 9.9681781 | 10.4009092 |
| 19 | 92924.01 | 251501.83 | 270653.23 | 9.9681279 | 10.4005411 |
| 18 | 92913.26 | 251288.90 | 270455.38 | 9.9680777 | 10.4001733 |
| 17 | 92902.50 | 251076.29 | 270257.84 | 9.9680274 | 10.3998057 |
| 16 | 92891.73 | 250863.98 | 270060.61 | 9.9679771 | 10.3994383 |
| 15 | 92880,95 | 250651.98 | 269863.70 | 9.9679267 | 10.3990711 |
| 14 | 92870.17 | 250440.29 | 269667.09 | 9.9678763 | 10.3987042 |
| 13 | 92859.38 | 250228.91 | 269470.79 | 9.9678258 | 10.3983375 |
| 12 | 92848.58 | 250017.84 | 269274.80 | 9.9677753 | 10.3979710 |
| 11 | 92837.77 | 249807.07 | 269079.12 | 9.9677247 | 10.3976047 |
| 10 | 92826.96 | 249596.61 | 268883.74 | 9.9676741 | 10.3972387 |
| 9 | 92816.14 | 249386.45 | 268688.67 | 9.9676235 | 10.3968729 |
| 8 | 92805.31 | 249176.60 | 268493.91 | 9.9675728 | 10.3965073 |
| 7 | 92794.47 | 248967.06 | 268299.45 | 9.9675221 | 10.3961419 |
| 6 | 92783.62 | 248757.81 | 268105.30 | 9.9674713 | 10.3957767 |
| 5 | 92772.77 | 248548.87 | 267911.45 | 9.9674205 | 10.3954118 |
| 4 | 92761.91 | 248340.23 | 267717.90 | 9.9673697 | 10.3950471 |
| 3 | 92751.04 | 248131.90 | 267524.65 | 9.9673188 | 10.3946826 |
| 2 | 92740.16 | 247923.86 | 267331.70 | 9.9672679 | 10.3943183 |
| 1 | 92729.28 | 247716.12 | 267139.06 | 9.9672169 | 10.3939543 |
| 0 | 92718.39 | 247508.69 | 266946.72 | 9.9671659 | 10.3935904 |

# 22 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log. I an |
|---|---|---|---|---|---|
| 0 | 37460.66 | 40402.62 | 107853.47 | 9.5735754 | 9.6064095 |
| 1 | 37487.63 | 40436.46 | 107866.16 | 9.57388.0 | 9.6067732 |
| 2 | 37514.59 | 40470.31 | 1078?8.85 | 9.5742003 | 9.6071366 |
| 3 | 37541.56 | 40504.17 | 107891.56 | 9.5745123 | 9.6074997 |
| 4 | 37568.52 | 40538.04 | 107904.27 | 9.5748240 | 9.6078627 |
| 5 | 37595.47 | 40571.91 | 107917.00 | 9.5751356 | 9.6082254 |
| 6 | 37622.43 | 40605.79 | 107929.75 | 9.5754468 | 9.6085880 |
| 7 | 37649.38 | 40639.68 | 107942.50 | 9.5757578 | 9.6089503 |
| 8 | 37676.32 | 40673.58 | 107955.27 | 9.5760685 | 9.6093124 |
| 9 | 37703.27 | 40707.48 | 107968.05 | 9.5763790 | 9.6096742 |
| 10 | 37730.21 | 40741.39 | 107980.84 | 9.5766892 | 9.6100359 |
| 11 | 37757.14 | 40775.31 | 107993.64 | 9.5769991 | 9.6103973 |
| 12 | 37784.08 | 40809.24 | 108006.46 | 9.5773088 | 9.6107586 |
| 13 | 37811.01 | 40843.18 | 108019.28 | 9.5776183 | 9.6111196 |
| 14 | 37837.94 | 40877.13 | 108032.12 | 9.5779275 | 9.6114804 |
| 15 | 37864.86 | 40911.08 | 108044.97 | 9.5782364 | 9.6118409 |
| 16 | 37891.78 | 40945.04 | 108057.84 | 9.5785450 | 9.6122013 |
| 17 | 37918.70 | 40979.01 | 108070.71 | 9.5788535 | 9.6125615 |
| 18 | 37945.62 | 41012.99 | 108083.60 | 9.5791616 | 9.6129214 |
| 19 | 37972.53 | 41046.97 | 108096.50 | 9.5794695 | 9.6132812 |
| 20 | 37999.44 | 41080.97 | 108109.42 | 9.5797772 | 9.6136407 |
| 21 | 38026.34 | 41114.97 | 108122.34 | 9.5800845 | 9.6140000 |
| 22 | 38053.24 | 41148.98 | 108135.28 | 9.5803917 | 9.6143591 |
| 23 | 38080.14 | 41183.00 | 108148.23 | 9.5806986 | 9.6147180 |
| 24 | 38107.04 | 41217.03 | 108161.19 | 9.5810052 | 9.6150766 |
| 25 | 38133.93 | 41251.06 | 108174.17 | 9.5813116 | 9.6154351 |
| 26 | 38160.82 | 4.285.10 | 108187.15 | 9.5816177 | 9.6157934 |
| 27 | 38187.70 | 41319.15 | 108200.15 | 9.5819236 | 9.6161514 |
| 28 | 38214.59 | 41353.21 | 108213.16 | 9.5822292 | 9.6165093 |
| 29 | 38241.47 | 41387.28 | 108226.18 | 9.5825345 | 9.6168669 |
| 30 | 38268.34 | 41421.36 | 108239.22 | 9.5828397 | 9.6172243 |

# 67 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 92718.39 | 247508.69 | 266946.72 | 9.9671659 | 10.3935904 |
| 59 | 92707.49 | 247301.55 | 266754.67 | 9.9671148 | 10.3932268 |
| 58 | 92696.58 | 247094.70 | 266562.92 | 9.9670637 | 10.3928634 |
| 57 | 92685.66 | 246888.16 | 266371.48 | 9.9670125 | 10.3925003 |
| 56 | 92674.73 | 246681.91 | 266180.33 | 9.9669614 | 10.3921373 |
| 55 | 92663.80 | 246475.96 | 265989.47 | 9.9669101 | 10.3917746 |
| 54 | 92652.86 | 246270.30 | 265798.91 | 9.9668588 | 10.3914120 |
| 53 | 92641.91 | 246064.94 | 265608.65 | 9.9668075 | 10.3910497 |
| 52 | 92630.96 | 245859.87 | 265418.68 | 9.9667562 | 10.3906876 |
| 51 | 92620.00 | 245655.09 | 265229.01 | 9.9667048 | 10.3903258 |
| 50 | 92609.03 | 245450.61 | 265039.62 | 9.9666533 | 10.3899641 |
| 49 | 92598.05 | 245246.42 | 264850.54 | 9.9666018 | 10.3896027 |
| 48 | 92587.06 | 245042.52 | 264661.74 | 9.9665503 | 10.3892414 |
| 47 | 92576.06 | 244838.91 | 264473.23 | 9.9664987 | 10.3888804 |
| 46 | 92565.06 | 244635.59 | 264285.02 | 9.9664471 | 10.3885196 |
| 45 | 92554.05 | 244432.56 | 264097.09 | 9.9663954 | 10.3881591 |
| 44 | 92543.03 | 244229.82 | 263909.46 | 9.9663437 | 10.3877987 |
| 43 | 92532.00 | 244027.36 | 263722.11 | 9.9662920 | 10.3874385 |
| 42 | 92520.97 | 243825.19 | 263535.05 | 9.9662402 | 10.3870786 |
| 41 | 92509.93 | 243623.31 | 263348.28 | 9.9661884 | 10.3867188 |
| 40 | 92498.88 | 243421.72 | 263161.80 | 9.9661365 | 10.3863593 |
| 39 | 92487.82 | 243220.41 | 262975.60 | 9.9660846 | 10.3860000 |
| 38 | 92476.75 | 243019.38 | 262789.69 | 9.9660326 | 10.3856409 |
| 37 | 92465.68 | 242818.64 | 262604.06 | 9.9659805 | 10.3852820 |
| 36 | 92454.60 | 242618.19 | 262418.72 | 9.9659285 | 10.3849234 |
| 35 | 92443.51 | 242418.01 | 262233.66 | 9.9658764 | 10.3845649 |
| 34 | 92432.41 | 242218.12 | 262048.88 | 9.9658243 | 10.3842066 |
| 33 | 92421.31 | 242018.51 | 261864.39 | 9.9657721 | 10.3838486 |
| 32 | 92410.20 | 241819.18 | 261680.18 | 9.9657199 | 10.3834907 |
| 31 | 92399.08 | 241620.13 | 261496.24 | 9.9656677 | 10.3831331 |
| 30 | 92387.95 | 241421.36 | 261312.59 | 9.9656153 | 10.3827757 |

# 22 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 38268.34 | 41421.36 | 108239.22 | 9.5828397 | 9.6172243 |
| 31 | 38295.22 | 41455.44 | 108252.27 | 9.5831445 | 9.6175815 |
| 32 | 38322.09 | 41489.53 | 108265.33 | 9.5834491 | 9.6179385 |
| 33 | 38348.95 | 41523.63 | 108278.40 | 9.5837535 | 9.6182953 |
| 34 | 38375.82 | 41557.74 | 108291.49 | 9.5840576 | 9.6186519 |
| 35 | 38402.68 | 41591.86 | 108304.58 | 9.5843615 | 9.6190083 |
| 36 | 38429.53 | 41625.99 | 108317.69 | 9.5846651 | 9.6193645 |
| 37 | 38456.39 | 41660.12 | 108330.81 | 9.5849685 | 9.6197205 |
| 38 | 38483.24 | 41694.26 | 108343.95 | 9.5852716 | 9.6200762 |
| 39 | 38510.08 | 41728.41 | 108357.09 | 9.5855745 | 9.6204318 |
| 40 | 38536.93 | 41762.57 | 108370.25 | 9.5858771 | 9.6207872 |
| 41 | 38563.77 | 41796.74 | 108383.42 | 9.5861795 | 9.6211423 |
| 42 | 38590.60 | 41830.91 | 108396.61 | 9.5864816 | 9.6214973 |
| 43 | 38617.44 | 41865.09 | 108409.80 | 9.5867835 | 9.6218520 |
| 44 | 38644.27 | 41899.28 | 108423.01 | 9.5870851 | 9.6222066 |
| 45 | 38671.10 | 41933.48 | 108436.23 | 9.5873865 | 9.6225609 |
| 45 | 38697.92 | 41967.69 | 108449.47 | 9.5876876 | 9.6229150 |
| 47 | 38724.74 | 42001.91 | 108462.71 | 9.5879885 | 9.6232690 |
| 48 | 38751.56 | 42036.13 | 108475.97 | 9.5882892 | 9.6236227 |
| 49 | 38778.37 | 42070.36 | 108489.24 | 9.5885896 | 9.6239763 |
| 50 | 38805.18 | 42104.60 | 108502.52 | 9.5888897 | 9.6243296 |
| 51 | 38831.99 | 42138.85 | 108515.82 | 9.5891897 | 9.6246827 |
| 52 | 38858.80 | 42173.11 | 108529.13 | 9.5894893 | 9.6250356 |
| 53 | 38885.60 | 42207.38 | 108542.45 | 9.5897888 | 9.6253884 |
| 54 | 38912.39 | 42241.66 | 108555.78 | 9.5900880 | 9.6257409 |
| 55 | 38939.19 | 42275.94 | 108569.12 | 9.5903869 | 9.6260932 |
| 56 | 38965.98 | 42310.23 | 108582.48 | 9.5906856 | 9.6264454 |
| 57 | 38992.77 | 42344.53 | 108595.85 | 9.5909841 | 9.6267973 |
| 58 | 39019.55 | 42378.84 | 108609.24 | 9.5912823 | 9.6271491 |
| 59 | 39046.33 | 42413.16 | 108622.63 | 9.5915803 | 9.6275006 |
| 60 | 39073.11 | 42447.49 | 108636.04 | 9.5918780 | 9.6278519 |

# 67 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 92387.95 | 241421.36 | 261312.59 | 9.9656153 | 10.3827757 |
| 29 | 92376.81 | 241222.86 | 261129.22 | 9.9655630 | 10.3824185 |
| 28 | 92365.67 | 241024.65 | 260946.13 | 9.9655106 | 10.3820615 |
| 27 | 92354.52 | 240826.72 | 260763.32 | 9.9654582 | 10.3817047 |
| 26 | 92343.36 | 240629.06 | 260580.78 | 9.9654057 | 10.3813481 |
| 25 | 92332.19 | 240431.68 | 260398.52 | 9.9653532 | 10.3809917 |
| 24 | 92321.02 | 240234.57 | 260216.54 | 9.9653006 | 10.3806355 |
| 23 | 92309.84 | 240037.74 | 260034.84 | 9.9652480 | 10.3802795 |
| 22 | 92298.65 | 239841.18 | 259853.41 | 9.9651952 | 10.3799238 |
| 21 | 92287.45 | 239644.90 | 259672.25 | 9.9651426 | 10.3795682 |
| 20 | 92276.24 | 239448.89 | 259491.37 | 9.9650899 | 10.3792128 |
| 19 | 92265.03 | 239253.16 | 259310.77 | 9.9650371 | 10.3788577 |
| 18 | 92253.81 | 239057.69 | 259130.43 | 9.9649843 | 10.3785027 |
| 17 | 92242.58 | 238862.50 | 258950.37 | 9.9649314 | 10.3781480 |
| 16 | 92231.34 | 238667.58 | 258770.58 | 9.9648785 | 10.3777934 |
| 15 | 92220.09 | 238472.93 | 258591.07 | 9.9648256 | 10.3774391 |
| 14 | 92208.84 | 238278.55 | 258411.82 | 9.9647726 | 10.3770850 |
| 13 | 92197.58 | 238084.44 | 258232.84 | 9.9647195 | 10.3767310 |
| 12 | 92186.31 | 237890.60 | 258054.14 | 9.9646665 | 10.3763773 |
| 11 | 92175.03 | 237697.03 | 257875.70 | 9.9646133 | 10.3760237 |
| 10 | 92163.75 | 237503.72 | 257697.53 | 9.9645602 | 10.3756704 |
| 9 | 92152.46 | 237310.68 | 257519.63 | 9.9645069 | 10.3753173 |
| 8 | 92141.16 | 237117.91 | 257341.99 | 9.9644537 | 10.3749644 |
| 7 | 92129.85 | 236925.40 | 257164.62 | 9.9644004 | 10.3746116 |
| 6 | 92118.54 | 236733.16 | 256987.52 | 9.9643470 | 10.3742591 |
| 5 | 92107.22 | 236541.18 | 256810.69 | 9.9642937 | 10.3739068 |
| 4 | 92095.89 | 236349.46 | 256634.12 | 9.9642402 | 10.3735546 |
| 3 | 92084.55 | 236158.01 | 256457.81 | 9.9641868 | 10.3732027 |
| 2 | 92073.20 | 235966.83 | 256281.76 | 9.9641332 | 10.3728509 |
| 1 | 92061.85 | 235775.90 | 256105.99 | 9.9640797 | 10.3724994 |
| 0 | 92050.49 | 235585.24 | 255930.47 | 9.9640261 | 10.3721481 |

# 23 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 39073.11 | 42447.49 | 108636.04 | 9.5918780 | 9.6278519 |
| 1 | 39099.89 | 42481.82 | 108649.46 | 9.5921755 | 9.6282031 |
| 2 | 39126.66 | 42516.16 | 108662.89 | 9.5924728 | 9.6285540 |
| 3 | 39153.43 | 42550.51 | 108676.34 | 9.5927698 | 9.6289048 |
| 4 | 39180.19 | 42584.87 | 108689.79 | 9.5930666 | 9.6292553 |
| 5 | 39206.95 | 42619.24 | 108703.26 | 9.5933631 | 9.6296057 |
| 6 | 39233.71 | 42653.62 | 108716.75 | 9.5936594 | 9.6299558 |
| 7 | 39260.47 | 42688.00 | 108730.24 | 9.5939555 | 9.6303058 |
| 8 | 39287.22 | 42722.39 | 108743.75 | 9.5942513 | 9.6306556 |
| 9 | 39313.97 | 42756.79 | 108757.27 | 9.5945469 | 9.6310052 |
| 10 | 39340.71 | 42791.20 | 108770.80 | 9.5948422 | 9.6313545 |
| 11 | 39367.45 | 42825.62 | 108784.35 | 9.5951373 | 9.6317037 |
| 12 | 39394.19 | 42860.05 | 108797.91 | 9.5954322 | 9.6320527 |
| 13 | 39420.93 | 42894.49 | 108811.48 | 9.5957268 | 9.6324015 |
| 14 | 39447.66 | 42928.94 | 108825.06 | 9.5960212 | 9.6327501 |
| 15 | 39474.39 | 42963.39 | 108838.66 | 9.5963154 | 9.6330985 |
| 16 | 39501.11 | 42997.85 | 108852.27 | 9.5966093 | 9.6334468 |
| 17 | 39527.83 | 43032.32 | 108865.89 | 9.5969030 | 9.6337948 |
| 18 | 39554.55 | 43066.80 | 108879.52 | 9.5971965 | 9.6341426 |
| 19 | 39581.27 | 43101.29 | 108893.17 | 9.5974897 | 9.6344903 |
| 20 | 39607.98 | 43135.79 | 108906.83 | 9.5977827 | 9.6348378 |
| 21 | 39634.69 | 43170.30 | 108920.50 | 9.5980754 | 9.6351850 |
| 22 | 39661.39 | 43204.81 | 108934.18 | 9.5983679 | 9.6355321 |
| 23 | 39688.09 | 43239.33 | 108947.88 | 9.5986602 | 9.6358790 |
| 24 | 39714.79 | 43273.86 | 108961.59 | 9.5989523 | 9.6362257 |
| 25 | 39741.48 | 43308.40 | 108975.31 | 9.5992441 | 9.6365722 |
| 26 | 39768.17 | 43342.95 | 108989.04 | 9.5995357 | 9.6369185 |
| 27 | 39794.86 | 43377.51 | 109002.79 | 9.5998271 | 9.6372646 |
| 28 | 39821.55 | 43412.08 | 109016.55 | 9.6001181 | 9.6376106 |
| 29 | 39848.23 | 43446.66 | 109030.32 | 9.6004090 | 9.6379563 |
| 30 | 39874.91 | 43481.24 | 109044.11 | 9.6006997 | 9.6383019 |

# 66 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 92050.49 | 235585.24 | 255930.47 | 9.9640261 | 10.3721481 |
| 59 | 92039.12 | 235394.83 | 255755.21 | 9.9639724 | 10.3717969 |
| 58 | 92027.74 | 235204.69 | 255580.22 | 9.9639187 | 10.3714460 |
| 57 | 92016.35 | 235014.81 | 255405.48 | 9.9638650 | 10.3710952 |
| 56 | 92004.96 | 234825.19 | 255231.01 | 9.9638112 | 10.3707447 |
| 55 | 91993.56 | 234635.82 | 255056.80 | 9.9637574 | 10.3703943 |
| 54 | 91982.15 | 234446.72 | 254882.84 | 9.9637036 | 10.3700442 |
| 53 | 91970.73 | 234257.87 | 254709.15 | 9.9636496 | 10.3696942 |
| 52 | 91959.31 | 234069.28 | 254535.71 | 9.9635957 | 10.3693444 |
| 51 | 91947.88 | 233880.95 | 254362.53 | 9.9635417 | 10.3689948 |
| 50 | 91936.44 | 233692.87 | 254189.61 | 9.9634877 | 10.3686455 |
| 49 | 91924.99 | 233505.05 | 254016.94 | 9.9634336 | 10.3682963 |
| 48 | 91913.53 | 233317.48 | 253844.53 | 9.9633795 | 10.3679473 |
| 47 | 91902.07 | 233130.17 | 253672.38 | 9.9633253 | 10.3675985 |
| 46 | 91890.60 | 232943.11 | 253500.48 | 9.9632711 | 10.3672499 |
| 45 | 91879.12 | 232756.30 | 253328.83 | 9.9632168 | 10.3669015 |
| 44 | 91867.63 | 232569.75 | 253157.44 | 9.9631625 | 10.3665532 |
| 43 | 91856.14 | 232383.45 | 252986.30 | 9.9631082 | 10.3662052 |
| 42 | 91844.64 | 232197.40 | 252815.41 | 9.9630538 | 10.3658574 |
| 41 | 91833.13 | 232011.60 | 252644.78 | 9.9629994 | 10.3655097 |
| 40 | 91821.61 | 231826.06 | 252474.40 | 9.9629449 | 10.3651622 |
| 39 | 91810.08 | 231640.76 | 252304.26 | 9.9628904 | 10.3648150 |
| 38 | 91798.55 | 231455.71 | 252134.38 | 9.9628358 | 10.3644679 |
| 37 | 91787.01 | 231270.91 | 251964.75 | 9.9627812 | 10.3641210 |
| 36 | 91775.46 | 231086.36 | 251795.37 | 9.9627266 | 10.3637743 |
| 35 | 91763.90 | 230902.06 | 251626.24 | 9.9626719 | 10.3634278 |
| 34 | 91752.34 | 230718.01 | 251457.35 | 9.9626172 | 10.3630815 |
| 33 | 91740.77 | 230534.20 | 251288.71 | 9.9625624 | 10.3627354 |
| 32 | 91729.19 | 230350.64 | 251120.32 | 9.9625076 | 10.3623894 |
| 31 | 91717.60 | 230167.32 | 250952.18 | 9.9624527 | 10.3620437 |
| 30 | 91706.01 | 229984.25 | 250784.28 | 9.9623978 | 10.3616981 |

# 23 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 39874.91 | 43481.24 | 109044.11 | 9.6006997 | 9.6383019 |
| 31 | 39901.58 | 43515.83 | 109057.91 | 9.6009901 | 9.6386473 |
| 32 | 39928.25 | 43550.43 | 109071.72 | 9.6012803 | 9.6389925 |
| 33 | 39954.92 | 43585.04 | 109085.54 | 9.6015703 | 9.6393375 |
| 34 | 39981.58 | 43619.66 | 109099.38 | 9.6018600 | 9.6396823 |
| 35 | 40008.24 | 43654.29 | 109113.23 | 9.6021495 | 9.6400269 |
| 36 | 40034.90 | 43688.93 | 109127.09 | 9.6024388 | 9.6403714 |
| 37 | 40061.56 | 43723.58 | 109140.97 | 9.6027278 | 9.6407156 |
| 38 | 42088.21 | 43758.23 | 109154.86 | 9.6030166 | 9.6410597 |
| 39 | 40114.86 | 43792.89 | 109168.76 | 9.6033052 | 9.6414036 |
| 40 | 40141.50 | 43827.56 | 109182.67 | 9.6035936 | 9.6417473 |
| 41 | 40168.14 | 43862.24 | 109196.59 | 9.6038817 | 9.6420908 |
| 42 | 40194.78 | 43896.93 | 109210.53 | 9.6041696 | 9.6424342 |
| 43 | 40221.41 | 43931.63 | 109224.48 | 9.6044573 | 9.6427773 |
| 44 | 40248.04 | 43966.34 | 109238.45 | 9.6047448 | 9.6431203 |
| 45 | 40274.67 | 44001.06 | 109252.43 | 9.6050320 | 9.6434631 |
| 46 | 40301.29 | 44035.78 | 109266.42 | 9.6053190 | 9.6438057 |
| 47 | 40327.91 | 44070.51 | 109280.42 | 9.6056057 | 9.6441481 |
| 48 | 40354.53 | 44105.25 | 109294.44 | 9.6058923 | 9.6444903 |
| 49 | 40381.14 | 44140.00 | 109308.47 | 9.6061786 | 9.6448324 |
| 50 | 40407.75 | 44174.76 | 109322.51 | 9.6064647 | 9.6451743 |
| 51 | 40434.36 | 44209.53 | 109336.56 | 9.6067506 | 9.6455160 |
| 52 | 40460.96 | 44244.31 | 109350.63 | 9.6070362 | 9.6458575 |
| 53 | 40487.56 | 44279.10 | 109364.71 | 9.6073216 | 9.6461988 |
| 54 | 40514.16 | 44313.90 | 109378.80 | 9.6076068 | 9.6465400 |
| 55 | 40540.75 | 44348.71 | 109392.91 | 9.6078918 | 9.6468810 |
| 56 | 40567.34 | 44383.53 | 109407.03 | 9.6081765 | 9.6472217 |
| 57 | 40593.93 | 44418.35 | 109421.16 | 9.6084611 | 9.6475624 |
| 58 | 40620.51 | 44453.18 | 109435 30 | 9.6087454 | 9.6479028 |
| 59 | 40647.09 | 44488.02 | 109449.46 | 9.6090294 | 9.6482431 |
| 60 | 40673.66 | 44522.87 | 109463.63 | 9.6093133 | 9.6485831 |

# 66 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 91706.01 | 229984.25 | 250784.28 | 9.9623978 | 10.3616981 |
| 29 | 91694.41 | 229801.43 | 250616.63 | 9.9623428 | 10.3613527 |
| 28 | 91682.80 | 229618.85 | 250449.23 | 9.9622878 | 10.3610075 |
| 27 | 91671.18 | 229436.51 | 250282.07 | 9.9622328 | 10.3606625 |
| 26 | 91659.55 | 229254.42 | 250115.15 | 9.9621777 | 10.3603177 |
| 25 | 91647.91 | 229072.57 | 249948.47 | 9.9621226 | 10.3599731 |
| 24 | 91636.27 | 228890.96 | 249782.04 | 9.9620674 | 10.3596286 |
| 23 | 91624.62 | 228709.59 | 249615.86 | 9.9620122 | 10.3592844 |
| 22 | 91612.96 | 228528.46 | 249449.91 | 9.9619569 | 10.3589403 |
| 21 | 91601.30 | 228347.58 | 249284.21 | 9.9619016 | 10.3585964 |
| 20 | 91589.63 | 228166.93 | 249118.74 | 9.9618463 | 10.3582527 |
| 19 | 91577.95 | 227986.53 | 348953.52 | 9.9617909 | 10.3579092 |
| 18 | 91566.26 | 227806.36 | 248788.54 | 9.9617355 | 10.3575658 |
| 17 | 91554.56 | 227626.43 | 248623.80 | 9.9616800 | 10.3572228 |
| 16 | 91542.86 | 227446.74 | 248459.29 | 9.9616245 | 10.3568797 |
| 15 | 91531.15 | 227267.29 | 248295.03 | 9.9615689 | 10.3565369 |
| 14 | 91519.43 | 227088.07 | 248131.00 | 9.9615133 | 10.3561943 |
| 13 | 91507.70 | 226909.09 | 247967.21 | 9.9614576 | 10.3558519 |
| 12 | 91495.96 | 226730.35 | 247803.66 | 9.9614020 | 10.3555097 |
| 11 | 91484.22 | 226551.84 | 247640.34 | 9.9613463 | 10.3551676 |
| 10 | 91472.47 | 226373.57 | 247477.26 | 9.9612904 | 10.3548257 |
| 9 | 91460.71 | 226195.53 | 247314.42 | 9.9612346 | 10.3544840 |
| 8 | 91448.95 | 226017.73 | 247151.81 | 9.9611787 | 10.3541425 |
| 7 | 91437.18 | 225840.16 | 246989.43 | 9.9611228 | 10.3538012 |
| 6 | 91425.40 | 225662.83 | 246827.29 | 9.9610668 | 10.3534600 |
| 5 | 91413.61 | 225485.72 | 246665.38 | 9.9610108 | 10.3531190 |
| 4 | 91401.81 | 225308.85 | 246503.71 | 9.9609548 | 10.3527783 |
| 3 | 91390.00 | 225132.21 | 246342.27 | 9.9608987 | 10.3524376 |
| 2 | 91378.19 | 224955.80 | 246181.06 | 9.9608426 | 10.3520972 |
| 1 | 91366.37 | 224779.62 | 246020.08 | 9.9607864 | 10.3517569 |
| 0 | 91354.54 | 224603.68 | 245859.33 | 9.9607302 | 10.3514169 |

# 24 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 40673.66 | 44522.87 | 109463.63 | 9.6093133 | 9.6485831 |
| 1 | 40700.23 | 44557.73 | 109477.81 | 9.6095969 | 9.6489230 |
| 2 | 40726.80 | 44592.60 | 109492.01 | 9.6098803 | 9.6492628 |
| 3 | 40753.37 | 44627.48 | 109506.22 | 9.6101635 | 9.6496023 |
| 4 | 40779.93 | 44662.37 | 109520.44 | 9.6104465 | 9.6499417 |
| 5 | 40806.49 | 44697.27 | 109534.67 | 9.6107293 | 9.6502809 |
| 6 | 40833.05 | 44732.17 | 109548.92 | 9.6110118 | 9.6506199 |
| 7 | 40859.60 | 44767.08 | 109563.18 | 9.6112941 | 9.6509587 |
| 8 | 40886.15 | 44802.00 | 109577.46 | 9.6115762 | 9.6512974 |
| 9 | 40912.69 | 44836.93 | 109591.74 | 9.6118580 | 9.6516359 |
| 10 | 40939.23 | 44871.87 | 109606.04 | 9.6121397 | 9.6519742 |
| 11 | 40965.77 | 44906.82 | 109620.36 | 9.6124211 | 9.6523123 |
| 12 | 40992.30 | 44941.78 | 109634.68 | 9.6127023 | 9.6526503 |
| 13 | 41018.83 | 44976.75 | 109649.02 | 9.6129833 | 9.6529881 |
| 14 | 41045.36 | 45011.73 | 109663.37 | 9.6132641 | 9.6533257 |
| 15 | 41071.89 | 45046.72 | 109677.74 | 9.6135446 | 9.6536631 |
| 16 | 41098.41 | 45081.72 | 109692.12 | 9.6138250 | 9.6540004 |
| 17 | 41124.93 | 45116.73 | 109706.51 | 9.6141051 | 9.6543375 |
| 18 | 41151.44 | 45151.74 | 109720.91 | 9.6143850 | 9.6546744 |
| 19 | 41177.95 | 45186.76 | 109735.33 | 9.6146647 | 9.6550112 |
| 20 | 41204.46 | 45221.79 | 109749.76 | 9.6149441 | 9.6553477 |
| 21 | 41230.96 | 45256.83 | 109764.20 | 9.6152234 | 9.6556841 |
| 22 | 41257.46 | 45291.88 | 109778.66 | 9.6155024 | 9.6560204 |
| 23 | 41283.95 | 45326.94 | 109793.13 | 9.6157812 | 9.6563564 |
| 24 | 41310.44 | 45362.01 | 109807.61 | 9.6160598 | 9.6566923 |
| 25 | 41336.93 | 45397.09 | 109822.11 | 9.6163382 | 9.6570280 |
| 26 | 41363.42 | 45432.18 | 109836.62 | 9.6166164 | 9.6573636 |
| 27 | 41389.90 | 45467.28 | 109851.14 | 9.6168944 | 9.6576989 |
| 28 | 41416.38 | 45502.39 | 109865.68 | 9.6171721 | 9.6580341 |
| 29 | 41442.85 | 45537.51 | 109880.23 | 9.6174496 | 9.6583692 |
| 30 | 41469.32 | 45572.64 | 109894.79 | 9.6177270 | 9.6587041 |

# 65 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 91354.54 | 224603.68 | 245859.33 | 9.9607302 | 10.3514169 |
| 59 | 91342.71 | 224427.96 | 245698.82 | 9.9606739 | 10.3510770 |
| 58 | 91330.87 | 224252.47 | 245538.53 | 9.9606176 | 10.3507372 |
| 57 | 91319.02 | 224077.21 | 245378.48 | 9.9605612 | 10.3503977 |
| 56 | 91307.16 | 223902.18 | 245218.65 | 9.9605048 | 10.3500583 |
| 55 | 91295.29 | 223727.38 | 245059.05 | 9.9604484 | 10.3497191 |
| 54 | 91283.42 | 223552.80 | 244899.68 | 9.9603919 | 10.3493801 |
| 53 | 91271.54 | 223378.45 | 244740.54 | 9.9603354 | 10.3490413 |
| 52 | 91259.65 | 223204.33 | 244581.63 | 9.9602788 | 10.3487026 |
| 51 | 91247.75 | 223030.43 | 244422.94 | 9.9602222 | 10.3483641 |
| 50 | 91235.84 | 222856.76 | 244264.48 | 9.9601655 | 10.3480258 |
| 49 | 91223.93 | 222683.31 | 244106.24 | 9.9601088 | 10.3476877 |
| 48 | 91212.01 | 222510.09 | 243948.23 | 9.9600520 | 10.3473497 |
| 47 | 91200.08 | 222337.09 | 243790.45 | 9.9599952 | 10.3470119 |
| 46 | 91188.14 | 222164.32 | 243632.89 | 9.9599384 | 10.3466743 |
| 45 | 91176.20 | 221991.77 | 243475.55 | 9.9598815 | 10.3463369 |
| 44 | 91164.25 | 221819.44 | 243318.44 | 9.9598246 | 10.3459996 |
| 43 | 91152.29 | 221647.33 | 243161.55 | 9.9597676 | 10.3456625 |
| 42 | 91140.32 | 221475.45 | 243004.89 | 9.9597106 | 10.3453256 |
| 41 | 91128.35 | 221303.79 | 242848.44 | 9.9596535 | 10.3449888 |
| 40 | 91116.37 | 221132.34 | 242692.22 | 9.9595964 | 10.3446523 |
| 39 | 91104.38 | 220961.12 | 242536.22 | 9.9595393 | 10.3443159 |
| 38 | 91092.38 | 220790.12 | 242380.44 | 9.9594821 | 10.3439796 |
| 37 | 91080.38 | 220619.34 | 242224.88 | 9.9594248 | 10.3436436 |
| 36 | 91068.37 | 220448.78 | 242069.54 | 9.9593675 | 10.3433077 |
| 35 | 91056.35 | 220278.43 | 241914.42 | 9.9593102 | 10.3429720 |
| 34 | 91044.32 | 220108.31 | 241759.52 | 9.9592528 | 10.3426364 |
| 33 | 91032.28 | 219938.40 | 241604.84 | 9.9591954 | 10.3423011 |
| 32 | 91020.24 | 219768.71 | 241450.38 | 9.9591380 | 10.3419659 |
| 31 | 91008.19 | 219599.23 | 241296.13 | 9.9590805 | 10.3416308 |
| 30 | 90996.13 | 219429.97 | 241142.10 | 9.9590229 | 10.3412960 |

# 24 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 41469.32 | 45572.64 | 109894.79 | 9.6177270 | 9.6587041 |
| 31 | 41495.79 | 45607.77 | 109909.36 | 9.6180041 | 9.6590387 |
| 32 | 41522.26 | 45642.91 | 109923.95 | 9.6182809 | 9.6593733 |
| 33 | 41548.72 | 45678.06 | 109938.55 | 9.6185576 | 9.6597076 |
| 34 | 41575.18 | 45713.22 | 109953.17 | 9.6188341 | 9.6600418 |
| 35 | 41601.63 | 45748.39 | 109967.79 | 9.6191103 | 9.6603758 |
| 36 | 41628.08 | 45783.57 | 109982.43 | 9.6193864 | 9.6607097 |
| 37 | 41654.53 | 45818.76 | 109997.09 | 9.6196622 | 9.6610434 |
| 38 | 41680.97 | 45853.96 | 110011.76 | 9.6199378 | 9.6613769 |
| 39 | 41707.41 | 45889.17 | 110026.44 | 9.6202132 | 9.6617103 |
| 40 | 41733.85 | 45924.39 | 110041.13 | 9.6204884 | 9.6620434 |
| 41 | 41760.28 | 45959.62 | 110055.84 | 9.6207634 | 9.6623765 |
| 42 | 41786.71 | 45994.86 | 110070.56 | 9.6210382 | 9.6627093 |
| 43 | 41813.13 | 46030.11 | 110085.29 | 9.6213127 | 9.6630420 |
| 44 | 41839.55 | 46065.37 | 110100.04 | 9.6215871 | 9.6633745 |
| 45 | 41865.97 | 46100.64 | 110114.80 | 9.6218612 | 9.6637069 |
| 46 | 41892.39 | 46135.91 | 110129.57 | 9.6221351 | 9.6640391 |
| 47 | 41918.80 | 46171.19 | 110144.36 | 9.6224088 | 9.6643711 |
| 48 | 41945.21 | 46206.48 | 110159.16 | 9.6226824 | 9.6647030 |
| 49 | 41971.61 | 46241.78 | 110173.97 | 9.6229557 | 9.6650346 |
| 50 | 41998.01 | 46277.09 | 110188.79 | 9.6232287 | 9.6653662 |
| 51 | 42024.41 | 46312.42 | 110203.63 | 9.6235016 | 9.6656975 |
| 52 | 42050.80 | 46347.76 | 110218.49 | 9.6237743 | 9.6660288 |
| 53 | 42077.19 | 46383.11 | 110233.35 | 9.6240467 | 9.6663598 |
| 54 | 42103.58 | 46418.46 | 110248.23 | 9.6243190 | 9.6666907 |
| 55 | 42129.96 | 46453.82 | 110263.13 | 9.6245911 | 9.6670214 |
| 56 | 42156.34 | 46489.19 | 110278.03 | 9.6248629 | 9.6673519 |
| 57 | 42182.72 | 46524.57 | 110292.95 | 9.6251346 | 9.6676823 |
| 58 | 42209.09 | 46559.96 | 110307.89 | 9.6254060 | 9.6680126 |
| 59 | 42235.46 | 46595.36 | 110322.83 | 9.6256772 | 9.6683426 |
| 60 | 42261.83 | 46630.77 | 110337.79 | 9.6259483 | 9.6686725 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 90996.13 | 219429.97 | 241142.10 | 9.9590229 | 10.3412960 |
| 29 | 90984.06 | 219260.93 | 240988.29 | 9.9589653 | 10.3409613 |
| 28 | 90971.98 | 219092.10 | 240834.69 | 9.9589077 | 10.3406267 |
| 27 | 90959.90 | 218923.49 | 240681.32 | 9.9588500 | 10.3402924 |
| 26 | 90947.81 | 218755.10 | 240528.15 | 9.9587923 | 10.3399582 |
| 25 | 90935.71 | 218586.91 | 240375.20 | 9.9587345 | 10.3396242 |
| 24 | 90923.61 | 218418.94 | 240222.47 | 9.9586767 | 10.3392903 |
| 23 | 90911.50 | 218251.19 | 240069.95 | 9.9586188 | 10.3389566 |
| 22 | 90899.38 | 218083.64 | 239917.64 | 9.9585609 | 10.3386231 |
| 21 | 90887.25 | 227916.31 | 239765.55 | 9.9585030 | 10.3382897 |
| 20 | 90875.11 | 217749.20 | 239613.67 | 9.9584450 | 10.3379566 |
| 19 | 90862.97 | 217582.29 | 239462.01 | 9.9583869 | 10.3376235 |
| 18 | 90850.82 | 217415.59 | 239310.55 | 9.9583288 | 10.3372907 |
| 17 | 90838.66 | 217249.11 | 239159.31 | 9.9582707 | 10.3369580 |
| 16 | 90826.49 | 217082.83 | 239008.28 | 9.9582125 | 10.3366255 |
| 15 | 90814.32 | 216916.77 | 238857.46 | 9.9581543 | 10.3362931 |
| 14 | 90802.14 | 216750.91 | 238706.85 | 9.9580961 | 10.3359609 |
| 13 | 90789.95 | 216585.27 | 238556.45 | 9.9580378 | 10.3356289 |
| 12 | 90777.75 | 216419.83 | 238406.25 | 9.9579794 | 10.3352970 |
| 11 | 90765.54 | 216254.60 | 238256.27 | 9.9579210 | 10.3349654 |
| 10 | 90753.33 | 216089.58 | 238106.50 | 9.9578626 | 10.3346338 |
| 9 | 90741.11 | 215924.76 | 237956.93 | 9.9578041 | 10.3343025 |
| 8 | 90728.88 | 215760.15 | 237807.58 | 9.9577456 | 10.3339712 |
| 7 | 90716.64 | 215595.75 | 237658.43 | 9.9576870 | 10.3336402 |
| 6 | 90704.40 | 215431.56 | 237509.49 | 9.9576284 | 10.3333093 |
| 5 | 90692.15 | 215267.57 | 237360.75 | 9.9575697 | 10.3329786 |
| 4 | 90679.89 | 215103.78 | 237212.22 | 9.9575110 | 10.3326481 |
| 3 | 90667.62 | 214940.20 | 237063.90 | 9.9574522 | 10.3323177 |
| 2 | 90655.35 | 214776.83 | 236915.78 | 9.9573934 | 10.3319874 |
| 1 | 90643.07 | 214613.66 | 236767.87 | 9.9573346 | 10.3316574 |
| 0 | 90630.78 | 214450.69 | 236620.16 | 9.9572757 | 10.3313275 |

# 25 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 42261.83 | 46630.77 | 110337.79 | 9.6259483 | 9.6686725 |
| 1 | 42288.19 | 46666.19 | 110352.77 | 9.6262191 | 9.6690023 |
| 2 | 42314.55 | 46701.62 | 110367.75 | 9.6264897 | 9.6693319 |
| 3 | 42340.90 | 46737.06 | 110382.75 | 9.6267601 | 9.6696613 |
| 4 | 42367.25 | 46772.51 | 110397.77 | 9.6270303 | 9.6699906 |
| 5 | 42393.60 | 46807.97 | 110412.79 | 9.6273003 | 9.6703197 |
| 6 | 42419.94 | 46843.43 | 110427.83 | 9.6275701 | 9.6706486 |
| 7 | 42446.28 | 46878.90 | 110442.89 | 9.6278397 | 9.6709774 |
| 8 | 42472.62 | 46914.38 | 110457.95 | 9.6281090 | 9.6713060 |
| 9 | 42498.95 | 46949.88 | 110473.03 | 9.6283782 | 9.6716345 |
| 10 | 42525.28 | 46985.39 | 110488.13 | 9.6286472 | 9.6719628 |
| 11 | 42551.61 | 47020.90 | 110503.24 | 9.6289160 | 9.6722910 |
| 12 | 42577.93 | 47056.43 | 110518.36 | 9.6291845 | 9.6726190 |
| 13 | 42604.25 | 47091.96 | 110533.49 | 9.6294529 | 9.6729468 |
| 14 | 42630.56 | 47127.51 | 110548.64 | 9.6297211 | 9.6732745 |
| 15 | 42656.87 | 47163.06 | 110563.80 | 9.6299890 | 9.6736020 |
| 16 | 42683.18 | 47198.63 | 110578.98 | 9.6302568 | 9.6739294 |
| 17 | 42709.49 | 47234.20 | 110594.17 | 9.6305243 | 9.6742566 |
| 18 | 42735.79 | 47269.78 | 110609.37 | 9.6307917 | 9.6745836 |
| 19 | 42762.09 | 47305.38 | 110624.58 | 9.6310589 | 9.6749105 |
| 20 | 42788.38 | 47340.98 | 110639.81 | 9.6313258 | 9.6752372 |
| 21 | 42814.67 | 47376.59 | 110655.06 | 9.6315926 | 9.6755638 |
| 22 | 42840.95 | 47412.22 | 110670.31 | 9.6318591 | 9.6758902 |
| 23 | 42867.23 | 47447.85 | 110685.58 | 9.6321255 | 9.6762165 |
| 24 | 42893.51 | 47483.49 | 110700.87 | 9.6323916 | 9.6765426 |
| 25 | 42919.79 | 47519.14 | 110716.16 | 9.6326576 | 9.6768686 |
| 26 | 42946.06 | 47554.81 | 110731.47 | 9.6329233 | 9.6771944 |
| 27 | 42972.33 | 47590.48 | 110746.80 | 9.6331889 | 9.6775201 |
| 28 | 42998.59 | 47626.16 | 110762.14 | 9.6334542 | 9.6778456 |
| 29 | 43024.85 | 47661.85 | 110777.49 | 9.6337194 | 9.6781709 |
| 30 | 43051.11 | 47697.55 | 110792.85 | 9.6339844 | 9.5784961 |

# 64 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan. |
|---|---|---|---|---|---|
| 60 | 90630.78 | 214450.69 | 236620.16 | 9.9572757 | 10.3313275 |
| 59 | 90618.48 | 214287.93 | 236472.65 | 9.95721[illegible]8 | 10.3309977 |
| 58 | 90606.17 | 214125.37 | 236325.35 | 9.9571578 | 10.3306681 |
| 57 | 90593.86 | 213963.01 | 236178.26 | 9.9570988 | 10.3303387 |
| 56 | 90581.54 | 213800.85 | 236031.36 | 9.9570397 | 10.3300094 |
| 55 | 90569.21 | 213638.89 | 235884.67 | 9.9569806 | 10.3296803 |
| 54 | 90556.88 | 213477.14 | 235738.18 | 9.9569215 | 10.3293514 |
| 53 | 90544.54 | 213315.59 | 235591.89 | 9.9568623 | 10.3290226 |
| 52 | 90532.19 | 213154.23 | 235445.81 | 9.9568030 | 10.3286940 |
| 51 | 90519.83 | 212993.08 | 235299.92 | 9.9567437 | 10.3283655 |
| 50 | 90507.46 | 212832.13 | 235154.24 | 9.9566844 | 10.3280372 |
| 49 | 90495.09 | 212671.37 | 235008.75 | 9.9566250 | 10.3277090 |
| 48 | 90482.71 | 212510.82 | 234863.47 | 9.9565656 | 10.3273810 |
| 47 | 90470.32 | 212350.46 | 234718.38 | 9.9565061 | 10.3270532 |
| 46 | 90457.92 | 212190.30 | 234573.49 | 9.9564466 | 10.3267255 |
| 45 | 90445.51 | 212030.34 | 234428.80 | 9.9563870 | 10.3263980 |
| 44 | 90433.10 | 211870.57 | 234284.31 | 9.9563274 | 10.3260706 |
| 43 | 90420.68 | 211711.01 | 234140.02 | 9.9562678 | 10.3257434 |
| 42 | 90408.25 | 211551.64 | 233995.93 | 9.9562081 | 10.3254164 |
| 41 | 90395.82 | 211392.46 | 233852.03 | 9.9561483 | 10.3250895 |
| 40 | 90383.38 | 211233.48 | 233708.33 | 9.9560886 | 10.3247628 |
| 39 | 90370.93 | 211074.70 | 233564.82 | 9.9560287 | 10.3244362 |
| 38 | 90358.47 | 210916.11 | 233421.52 | 9.9559689 | 10.3241097 |
| 37 | 90346.00 | 210757.71 | 233278.40 | 9.9559089 | 10.3237835 |
| 36 | 90333.53 | 210599.51 | 233135.48 | 9.9558490 | 10.3234574 |
| 35 | 90321.05 | 210441.50 | 232992.76 | 9.9557890 | 10.3231314 |
| 34 | 90308.56 | 210283.69 | 232850.23 | 9.9557289 | 10.3228056 |
| 33 | 90296.06 | 210126.07 | 232707.90 | 9.9556688 | 10.3224799 |
| 32 | 90283.56 | 209968.64 | 232565.75 | 9.9556087 | 10.3221544 |
| 31 | 90271.05 | 209811.40 | 232423.81 | 9.9555485 | 10.3218291 |
| 30 | 90258.53 | 209654.36 | 232282.05 | 9.9554882 | 10.3215039 |

# 25 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 43051.11 | 47697.55 | 110792.85 | 9.6339844 | 9.6784961 |
| 31 | 43077.36 | 47733.26 | 110808.23 | 9.6342491 | 9.6788211 |
| 32 | 43103.61 | 47768.99 | 110823.63 | 9.6345137 | 9.6791460 |
| 33 | 43129.86 | 47804.72 | 110839.03 | 9.6347780 | 9.6794708 |
| 34 | 43156.10 | 47840.46 | 110854.45 | 9.6350422 | 9.6797953 |
| 35 | 43182.34 | 47876.21 | 110869.89 | 9.6353062 | 9.6801198 |
| 36 | 43208.57 | 47911.97 | 110885.33 | 9.6355699 | 9.6804440 |
| 37 | 43234.80 | 47947.74 | 110900.79 | 9.6358335 | 9.6807682 |
| 38 | 43261.03 | 47983.52 | 110916.27 | 9.6360969 | 9.6810921 |
| 39 | 43287.26 | 48019.32 | 110931.76 | 9.6363601 | 9.6814160 |
| 40 | 43313.48 | 48055.12 | 110947.26 | 9.6366231 | 9.6817396 |
| 41 | 43339.70 | 48090.93 | 110962.77 | 9.6368859 | 9.6820632 |
| 42 | 43365.91 | 48126.75 | 110978.30 | 9.6371484 | 9.6823865 |
| 43 | 43392.12 | 48162.58 | 110993.85 | 9.6374108 | 9.6827098 |
| 44 | 43418.33 | 48198.42 | 111009.41 | 9.6376731 | 9.6830328 |
| 45 | 43444.53 | 48234.27 | 111024.98 | 9.6379351 | 9.6833557 |
| 46 | 43470.73 | 48270.14 | 111040.56 | 9.6381969 | 9.6836785 |
| 47 | 43496.92 | 48306.01 | 111056.16 | 9.6384585 | 9.6840011 |
| 48 | 43523.11 | 48341.89 | 111071.77 | 9.6387199 | 9.6843236 |
| 49 | 43549.30 | 48377.78 | 111087.40 | 9.6389812 | 9.6846459 |
| 50 | 43575.48 | 48413.68 | 111103.04 | 9.6392422 | 9.6849681 |
| 51 | 43601.66 | 48449.59 | 111118.69 | 9.6395030 | 9.6852901 |
| 52 | 43627.84 | 48485.52 | 111134.36 | 9.6397637 | 9.6856120 |
| 53 | 43654.01 | 48521.45 | 111150.04 | 9.6400241 | 9.6859338 |
| 54 | 43680.18 | 48557.39 | 111165.73 | 9.6402844 | 9.6862553 |
| 55 | 43706.34 | 48593.34 | 111181.44 | 9.6405445 | 9.6865768 |
| 56 | 43732.50 | 48629.31 | 111197.16 | 9.6408044 | 9.6868981 |
| 57 | 43758.66 | 48665.28 | 111212.90 | 9.6410640 | 9.6872192 |
| 58 | 43784.82 | 48701.26 | 111228.65 | 9.6413235 | 9.6875402 |
| 59 | 43810.97 | 48737.26 | 111244.42 | 9.6415828 | 9.6878611 |
| 60 | 43837.12 | 48773.26 | 111260.19 | 9.6418420 | 9.6881818 |

# 64 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 90258.53 | 209654.36 | 232282.05 | 9.9554882 | 10.3215039 |
| 29 | 90246.00 | 209497.51 | 232140.49 | 9.9554280 | 10.3211789 |
| 28 | 90233.47 | 209340.84 | 231999.11 | 9.9553676 | 10.3208540 |
| 27 | 90220.93 | 209184.37 | 231857.94 | 9.9553073 | 10.3205292 |
| 26 | 90208.38 | 209028.09 | 231716.95 | 9.9552469 | 10.3202047 |
| 25 | 90195.82 | 208872.00 | 231576.15 | 9.9551864 | 10.3198803 |
| 24 | 90183.25 | 208716.10 | 231435.54 | 9.9551259 | 10.3195560 |
| 23 | 90170.68 | 208560.39 | 231295.13 | 9.9550653 | 10.3192318 |
| 22 | 90158.10 | 208404.86 | 231154.90 | 9.9550047 | 10.3189079 |
| 21 | 90145.51 | 208249.53 | 231014.86 | 9.9549441 | 10.3185840 |
| 20 | 90132.91 | 208094.38 | 230875.01 | 9.9548834 | 10.3182604 |
| 19 | 90120.31 | 207939.42 | 230735.35 | 9.9548227 | 10.3179368 |
| 18 | 90107.70 | 207784.65 | 230595.88 | 9.9547619 | 10.3176135 |
| 17 | 90095.08 | 207630.07 | 230456.60 | 9.9547011 | 10.3172902 |
| 16 | 90082.45 | 207475.67 | 230317.51 | 9.9546402 | 10.3169672 |
| 15 | 90069.82 | 207321.46 | 230178.60 | 9.9545793 | 10.3166443 |
| 14 | 90057.18 | 207167.43 | 230039.88 | 9.9545184 | 10.3163215 |
| 13 | 90044.53 | 207013.59 | 229901.34 | 9.9544574 | 10.3159989 |
| 12 | 90031.87 | 206859.93 | 229762.99 | 9.9543963 | 10.3156764 |
| 11 | 90019.21 | 206706.46 | 229624.83 | 9.9543352 | 10.3153541 |
| 10 | 90006.54 | 206553.18 | 229486.85 | 9.9542741 | 10.3150319 |
| 9 | 89993.86 | 206400.08 | 229349.06 | 9.9542129 | 10.3147099 |
| 8 | 89981.17 | 206247.16 | 229211.45 | 9.9541517 | 10.3143880 |
| 7 | 89968.48 | 206094.42 | 229074.03 | 9.9540904 | 10.3140662 |
| 6 | 89955.78 | 205941.87 | 228936.79 | 9.9540291 | 10.3137447 |
| 5 | 89943.07 | 205789.50 | 228799.74 | 9.9539677 | 10.3134232 |
| 4 | 89930.35 | 205637.32 | 228662.86 | 9.9539063 | 10.3131019 |
| 3 | 89917.62 | 205485.31 | 228526.18 | 9.9538448 | 10.3127808 |
| 2 | 89904.89 | 205333.49 | 228389.67 | 9.9537833 | 10.3124598 |
| 1 | 89892.15 | 205181.84 | 228253.34 | 9.9537218 | 10.3121389 |
| 0 | 89879.40 | 205030.38 | 228117.20 | 9.9536602 | 10.3118182 |

# 26 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 43837.12 | 48773.26 | 111260.19 | 9.6418420 | 9.6881818 |
| 1 | 43863.26 | 48809.27 | 111275.98 | 9.6421009 | 9.6885023 |
| 2 | 43889.40 | 48845.30 | 111291.79 | 9.6423596 | 9.6888227 |
| 3 | 43915.53 | 48881.33 | 111307.61 | 9.6426182 | 9.6891430 |
| 4 | 43941.66 | 48917.37 | 111323.45 | 9.6428765 | 9.6894631 |
| 5 | 43967.79 | 48953.43 | 111339.30 | 9.6431347 | 9.6897831 |
| 6 | 43993.92 | 48989.49 | 111355.16 | 9.6433926 | 9.6901030 |
| 7 | 44020.04 | 49025.57 | 111371.03 | 9.6436504 | 9.6904226 |
| 8 | 44046.16 | 49061.66 | 111386.92 | 9.6439080 | 9.6907422 |
| 9 | 44072.27 | 49097.75 | 111402.82 | 9.6441654 | 9.6910616 |
| 10 | 44098.38 | 49133.86 | 111418.74 | 9.6444226 | 9.6913809 |
| 11 | 44124.48 | 49169.97 | 111434.67 | 9.6446796 | 9.6917000 |
| 12 | 44150.58 | 49206.10 | 111450.62 | 9.6449365 | 9.6920189 |
| 13 | 44176.68 | 49242.24 | 111466.58 | 9.6451931 | 9.6923378 |
| 14 | 44202.78 | 49278.38 | 111482.55 | 9.6454496 | 9.6926565 |
| 15 | 44228.87 | 49314.54 | 111498.54 | 9.6457058 | 9.6929750 |
| 16 | 44254.96 | 49350.71 | 111514.54 | 9.6459619 | 9.6932934 |
| 17 | 44281.04 | 49386.89 | 111530.56 | 9.6462178 | 9.6936117 |
| 18 | 44307.12 | 49423.08 | 111546.59 | 9.6464735 | 9.6939298 |
| 19 | 44333.20 | 49459.28 | 111562.63 | 9.6467290 | 9.6942478 |
| 20 | 44359.27 | 49495.49 | 111578.69 | 9.6469844 | 9.6945656 |
| 21 | 44385.34 | 49531.71 | 111594.76 | 9.6472395 | 9.6948833 |
| 22 | 44411.40 | 49567.94 | 111610.84 | 9.6474945 | 9.6952009 |
| 23 | 44437.46 | 49604.18 | 111626.94 | 9.6477492 | 9.6955183 |
| 24 | 44463.52 | 49640.43 | 111643.06 | 9.6480038 | 9.6958355 |
| 25 | 44489.57 | 49676.69 | 111659.19 | 9.6482582 | 9.6961527 |
| 26 | 44515.62 | 49712.97 | 111675.33 | 9.6485124 | 9.6964697 |
| 27 | 44541.67 | 49749.25 | 111691.49 | 9.6487665 | 9.6967865 |
| 28 | 44567.71 | 49785.54 | 111707.66 | 9.6490203 | 9.6971032 |
| 29 | 44593.75 | 49821.85 | 111723.84 | 9.6492740 | 9.6974198 |
| 30 | 44619.78 | 49858.16 | 111740.04 | 9.6495274 | 9.6977363 |

# 63 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 89879.40 | 205030.38 | 228117.20 | 9.9536602 | 10.3118182 |
| 59 | 89866.65 | 204879.10 | 227981.24 | 9.9535985 | 10.3114977 |
| 58 | 89853.89 | 204728.00 | 227845.46 | 9.9535369 | 10.3111773 |
| 57 | 89841.12 | 204577.08 | 227709.86 | 9.9534751 | 10.3108570 |
| 56 | 89828.34 | 204426.34 | 227574.45 | 9.9534134 | 10.3105369 |
| 55 | 89815.55 | 204275.78 | 227439.21 | 9.9533515 | 10.3102169 |
| 54 | 89802.76 | 204125.40 | 227304.15 | 9.9532897 | 10.3098970 |
| 53 | 89789.96 | 203975.19 | 227169.27 | 9.9532278 | 10.3095774 |
| 52 | 89777.15 | 203825.17 | 227034.57 | 9.9531658 | 10.3092578 |
| 51 | 89764.33 | 203675.32 | 226900.05 | 9.9531038 | 10.3089384 |
| 50 | 89751.51 | 203525.65 | 226765.71 | 9.9530418 | 10.3086191 |
| 49 | 89738.68 | 203376.15 | 226631.55 | 9.9529797 | 10.3083000 |
| 48 | 89725.84 | 203226.83 | 226497.56 | 9.9529175 | 10.3079811 |
| 47 | 89712.99 | 203077.69 | 226363.75 | 9.9528553 | 10.3076622 |
| 46 | 89700.13 | 202928.73 | 226230.12 | 9.9527931 | 10.3073435 |
| 45 | 89687.27 | 202779.94 | 226096.67 | 9.9527308 | 10.3070250 |
| 44 | 89674.40 | 202631.33 | 225963.39 | 9.9526685 | 10.3067066 |
| 43 | 89661.52 | 202482.89 | 225830.29 | 9.9526061 | 10.3063883 |
| 42 | 89648.64 | 202334.62 | 225697.36 | 9.9525437 | 10.3060702 |
| 41 | 89635.75 | 202186.53 | 225564.61 | 9.9524813 | 10.3057522 |
| 40 | 89622.85 | 202038.62 | 225432.04 | 9.9524188 | 10.3054344 |
| 39 | 89609.94 | 201890.88 | 225299.64 | 9.9523562 | 10.3051167 |
| 38 | 89597.03 | 201743.31 | 225167.41 | 9.9522936 | 10.3047991 |
| 37 | 89584.11 | 201595.92 | 225035.36 | 9.9522310 | 10.3044817 |
| 36 | 89571.18 | 201448.69 | 224903.48 | 9.9521683 | 10.3041645 |
| 35 | 89558.24 | 201301.64 | 224771.78 | 9.9521055 | 10.3038473 |
| 34 | 89545.29 | 201154.77 | 224640.24 | 9.9520428 | 10.3035303 |
| 33 | 89532.34 | 201008.06 | 224508.89 | 9.9519799 | 10.3032135 |
| 32 | 89519.38 | 200861.53 | 224377.70 | 9.9519171 | 10.3028968 |
| 31 | 89506.41 | 200715.16 | 224246.69 | 9.9518541 | 10.3025802 |
| 30 | 89493.43 | 200568.97 | 224115.84 | 9.9517912 | 10.3022637 |

# 26 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 44619.78 | 49858.16 | 111740.04 | 9.6495274 | 9.6977363 |
| 31 | 44645.81 | 49894.49 | 111756.25 | 9.6497807 | 9.6980526 |
| 32 | 44671.84 | 49930.82 | 111772.48 | 9.6500338 | 9.6983687 |
| 33 | 44697.86 | 49967.17 | 111788.72 | 9.6502868 | 9.6986847 |
| 34 | 44723.88 | 50003.52 | 111804.98 | 9.6505395 | 9.6990006 |
| 35 | 44749.90 | 50039.89 | 111821.25 | 9.6507920 | 9.6993164 |
| 36 | 44775.91 | 50076.27 | 111837.53 | 9.6510444 | 9.6996320 |
| 37 | 44801.92 | 50112.66 | 111853.83 | 9.6512966 | 9.6999474 |
| 38 | 44827.92 | 50149.06 | 111870.14 | 9.6515486 | 9.7002628 |
| 39 | 44853.92 | 50185.47 | 111886.47 | 9.6518004 | 9.7005780 |
| 40 | 44879.92 | 50221.89 | 111902.81 | 9.6520521 | 9.7008930 |
| 41 | 44905.91 | 50258.32 | 111919.16 | 9.6523035 | 9.7012080 |
| 42 | 44931.90 | 50294.76 | 111935.53 | 9.6525548 | 9.7015227 |
| 43 | 44957.89 | 50331.21 | 111951.91 | 9.6528059 | 9.7018374 |
| 44 | 44983.87 | 50367.67 | 111968.31 | 9.6530568 | 9.7021519 |
| 45 | 45009.85 | 50404.15 | 111984.72 | 9.6533075 | 9.7024663 |
| 46 | 45035.82 | 50440.63 | 112001.15 | 9.6535581 | 9.7027805 |
| 47 | 45061.79 | 50477.13 | 112017.59 | 9.6538084 | 9.7030946 |
| 48 | 45087.76 | 50513.63 | 112034.05 | 9.6540586 | 9.7034086 |
| 49 | 45113.72 | 50550.15 | 112050.52 | 9.6543086 | 9.7037225 |
| 50 | 45139.68 | 50586.68 | 112067.00 | 9.6545584 | 9.7040362 |
| 51 | 45165.63 | 50623.22 | 112083.50 | 9.6548081 | 9.7043497 |
| 52 | 45191.58 | 50659.77 | 112100.01 | 9.6550575 | 9.7046632 |
| 53 | 45217.53 | 50696.33 | 112116.53 | 9.6553068 | 9.7049765 |
| 54 | 45243.47 | 50732.90 | 112133.07 | 9.6555559 | 9.7052897 |
| 55 | 45269.41 | 50769.48 | 112149.63 | 9.6558048 | 9.7056027 |
| 56 | 45295.35 | 50806.07 | 112166.20 | 9.6560536 | 9.7059156 |
| 57 | 45321.28 | 50842.67 | 112182.78 | 9.6563021 | 9.7062284 |
| 58 | 45347.21 | 50879.28 | 112199.38 | 9.6565505 | 9.7065410 |
| 59 | 45373.13 | 50915.91 | 112216.00 | 9.6567987 | 9.7068535 |
| 60 | 45399.05 | 50952.54 | 112232.62 | 9.6570468 | 9.7071659 |

# 63 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 89493.43 | 200568.97 | 224115.84 | 9.9517912 | 10.3022637 |
| 29 | 89480.45 | 200422.95 | 223985.17 | 9.9517282 | 10.3019474 |
| 28 | 89467.46 | 200277.10 | 223854.67 | 9.9516651 | 10.3016313 |
| 27 | 89454.46 | 200131.42 | 223724.35 | 9.9516020 | 10.3013153 |
| 26 | 89441.45 | 199985.90 | 223594.19 | 9.9515389 | 10.3009994 |
| 25 | 89428.44 | 199840.56 | 223464.20 | 9.9514757 | 10.3006836 |
| 24 | 89415.42 | 199695.39 | 223334.38 | 9.9514124 | 10.3003680 |
| 23 | 89402.39 | 199550.38 | 223204.74 | 9.9513492 | 10.3000526 |
| 22 | 89389.36 | 199405.54 | 223075.26 | 9.9512858 | 10.2997372 |
| 21 | 89376.32 | 199260.87 | 222945.95 | 9.9512224 | 10.2994220 |
| 20 | 89363.27 | 199116.37 | 222816.81 | 9.9511590 | 10.2991070 |
| 19 | 89350.21 | 198972.04 | 222687.83 | 9.9510956 | 10.2987920 |
| 18 | 89337.14 | 198827.87 | 222559.03 | 9.9510320 | 10.2984773 |
| 17 | 89324.06 | 198683.87 | 222430.39 | 9.9509685 | 10.2981626 |
| 16 | 89310.98 | 198540.03 | 222301.92 | 9.9509049 | 10.2978481 |
| 15 | 89297.89 | 198396.36 | 222173.62 | 9.9508412 | 10.2975337 |
| 14 | 89284.79 | 198252.86 | 222045.48 | 9.9507775 | 10.2972195 |
| 13 | 89271.69 | 198109.52 | 221917.51 | 9.9507138 | 10.2969054 |
| 12 | 89258.58 | 197966.35 | 221789.71 | 9.9506500 | 10.2965914 |
| 11 | 89245.46 | 197823.34 | 221662.07 | 9.9505861 | 10.2962775 |
| 10 | 89232.33 | 197680.50 | 221534.60 | 9.9505223 | 10.2959638 |
| 9 | 89219.20 | 197537.82 | 221407.30 | 9.9504583 | 10.2956503 |
| 8 | 89206.06 | 197395.31 | 221280.16 | 9.9503944 | 10.2953368 |
| 7 | 89192.91 | 197252.96 | 221153.18 | 9.9503303 | 10.2950235 |
| 6 | 89179.75 | 197110.77 | 221026.37 | 9.9502663 | 10.2947103 |
| 5 | 89166.59 | 196968.74 | 220899.72 | 9.9502022 | 10.2943973 |
| 4 | 89153.42 | 196826.88 | 220773.23 | 9.9501380 | 10.2940844 |
| 3 | 89140.24 | 196685.18 | 220646.91 | 9.9500738 | 10.2937716 |
| 2 | 89127.05 | 196543.64 | 220520.75 | 9.9500095 | 10.2934590 |
| 1 | 89113.85 | 196402.27 | 220394.76 | 9.9499452 | 10.2931465 |
| 0 | 89100.65 | 196261.05 | 220268.93 | 9.9498809 | 10.2928341 |

# 27 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 45399.05 | 50952.54 | 112232.62 | 9.6570468 | 9.7071659 |
| 1 | 45424.97 | 50989.19 | 112249.26 | 9.6572946 | 9.7074781 |
| 2 | 45450.88 | 51025.85 | 112265.92 | 9.6575423 | 9.7077902 |
| 3 | 45476.79 | 51062.52 | 112282.59 | 9.6577898 | 9.7081022 |
| 4 | 45502.69 | 51099.19 | 112299.28 | 9.6580371 | 9.7084141 |
| 5 | 45528.59 | 51135.88 | 112315.98 | 9.6582842 | 9.7087258 |
| 6 | 45554.49 | 51172.59 | 112332.69 | 9.6585312 | 9.7090374 |
| 7 | 45580.38 | 51209.30 | 112349.42 | 9.6587780 | 9.7093488 |
| 8 | 45606.27 | 51246.02 | 112366.16 | 9.6590246 | 9.7096601 |
| 9 | 45632.16 | 51282.75 | 112382.92 | 9.6592710 | 9.7099713 |
| 10 | 45658.04 | 51319.50 | 112399.69 | 9.6595173 | 9.7102824 |
| 11 | 45683.92 | 51356.25 | 112416.48 | 9.6597634 | 9.7105933 |
| 12 | 45709.79 | 51393.02 | 112433.28 | 9.6600093 | 9.7109041 |
| 13 | 45735.66 | 51429.80 | 112450.10 | 9.6602550 | 9.7112148 |
| 14 | 45761.53 | 51466.58 | 112466.93 | 9.6605005 | 9.7115254 |
| 15 | 45787.39 | 51503.38 | 112483.77 | 9.6607459 | 9.7118358 |
| 16 | 45813.25 | 51540.19 | 112500.63 | 9.6609911 | 9.7121461 |
| 17 | 45839.10 | 51577.02 | 112517.50 | 9.6612361 | 9.7124562 |
| 18 | 45864.95 | 51613.85 | 112534.39 | 9.6614810 | 9.7127662 |
| 19 | 45890.80 | 51650.69 | 112551.29 | 9.6617257 | 9.7130761 |
| 20 | 45916.64 | 51687.55 | 112568.21 | 9.6619701 | 9.7133859 |
| 21 | 45942.48 | 51724.41 | 112585.14 | 9.6622145 | 9.7136956 |
| 22 | 45968.32 | 51761.29 | 112602.09 | 9.6624586 | 9.7140051 |
| 23 | 45994.15 | 51798.18 | 112619.05 | 9.6627026 | 9.7143145 |
| 24 | 46019.98 | 51835.08 | 112636.03 | 9.6629464 | 9.7146237 |
| 25 | 46045.80 | 51871.99 | 112653.02 | 9.6631900 | 9.7149329 |
| 26 | 46071.62 | 51908.91 | 112670.03 | 9.6634335 | 9.7152419 |
| 27 | 46097.44 | 51945.84 | 112687.05 | 9.6636768 | 9.7155508 |
| 28 | 46123.25 | 51982.78 | 112704.08 | 9.6639199 | 9.7158595 |
| 29 | 46149.06 | 52019.74 | 112721.13 | 9.6641628 | 9.7161682 |
| 30 | 46174.86 | 52056.70 | 112738.19 | 9.6644056 | 9.7164767 |

## 62 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 89100.65 | 196261.05 | 220268.93 | 9.9498809 | 10.2928341 |
| 59 | 89087.44 | 196120.00 | 220143.26 | 9.9498165 | 10.2925219 |
| 58 | 89074.22 | 195979.10 | 220017.75 | 9.9497521 | 10.2922098 |
| 57 | 89061.00 | 195838.37 | 219892.40 | 9.9496876 | 10.2918978 |
| 56 | 89047.77 | 195697.80 | 219767.21 | 9.9496230 | 10.2915859 |
| 55 | 89034.53 | 195557.39 | 219642.19 | 9.9495585 | 10.2912742 |
| 54 | 89021.28 | 195417.13 | 219517.33 | 9.9494938 | 10.2909626 |
| 53 | 89008.02 | 195277.04 | 219392.62 | 9.9494292 | 10.2906512 |
| 52 | 88994.76 | 195137 11 | 219268.08 | 9.9493645 | 10.2903399 |
| 51 | 88981.49 | 194997.33 | 219143.70 | 9.9492997 | 10.2900287 |
| 50 | 88968.21 | 194857.71 | 219019.47 | 9.9492349 | 10.2897176 |
| 49 | 88954.93 | 194718.26 | 218895.41 | 9.9491700 | 10.2894067 |
| 48 | 88941.64 | 194578.96 | 218771.50 | 9.9491051 | 10.2890959 |
| 47 | 88928.34 | 194439.81 | 218647.75 | 9.9490402 | 10.2887852 |
| 46 | 88915.03 | 194300.83 | 218524.17 | 9.9489752 | 10.2884746 |
| 45 | 88901.71 | 194162.00 | 218400.74 | 9.9489101 | 10.2881642 |
| 44 | 88888.39 | 194023.33 | 218277.46 | 9.9488450 | 10.2878539 |
| 43 | 88875.06 | 193884.81 | 218154.35 | 9.9487799 | 10.2875438 |
| 42 | 88861.72 | 193746.45 | 218031.39 | 9.9487147 | 10.2872338 |
| 41 | 88848.37 | 193608.25 | 217908.59 | 9.9486495 | 10.2869239 |
| 40 | 88835.02 | 193470.20 | 217785.94 | 9.9485842 | 10.2866141 |
| 39 | 88821.66 | 193332.31 | 217663.46 | 9.9485189 | 10.2863044 |
| 38 | 88808.29 | 193194.57 | 217541.12 | 9.9484535 | 10.2859949 |
| 37 | 88794.92 | 193056.98 | 217418.95 | 9.9483881 | 10.2856855 |
| 36 | 88781.54 | 192919.56 | 217296.93 | 9.9483227 | 10.2853763 |
| 35 | 88768.15 | 192782.28 | 217175.06 | 9.9482572 | 10.2850671 |
| 34 | 88754.75 | 192645.16 | 217053.35 | 9.9481916 | 10.2847581 |
| 33 | 88741.34 | 192508.19 | 216931.80 | 9.9481260 | 10.2844492 |
| 32 | 88727.93 | 192371.38 | 216810.40 | 9.9480604 | 10.2841405 |
| 31 | 88714.51 | 192234.72 | 216689.15 | 9.9479947 | 10.2838318 |
| 30 | 88701.08 | 192098.21 | 216568.06 | 9.9479289 | 10.2835233 |

## 27 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 46174.86 | 52056.70 | 112738.19 | 9.6644056 | 9.7164767 |
| 31 | 46200.66 | 52093.68 | 112755.27 | 9.6646482 | 9.7167851 |
| 32 | 46226.46 | 52130.67 | 112772.37 | 9.6648906 | 9.7170933 |
| 33 | 46252.25 | 52167.67 | 112789.48 | 9.6651329 | 9.7174014 |
| 34 | 46278.04 | 52204.68 | 112806.60 | 9.6653749 | 9.7177094 |
| 35 | 46303.82 | 52241.70 | 112823.74 | 9.6656168 | 9.7180173 |
| 36 | 46329.60 | 52278.74 | 112840.89 | 9.6658586 | 9.7183251 |
| 37 | 46355.38 | 52315.78 | 112858.06 | 9.6661001 | 9.7186327 |
| 38 | 46381.15 | 52352.84 | 112875.24 | 9.6663415 | 9.7189402 |
| 39 | 46406.92 | 52389.90 | 112892.44 | 9.6665828 | 9.7192476 |
| 40 | 46432.69 | 52426.98 | 112909.65 | 9.6668238 | 9.7195549 |
| 41 | 46458.45 | 52464.07 | 112926.88 | 9.6670647 | 9.7198620 |
| 42 | 46484.21 | 52501.17 | 112944.12 | 9.6673054 | 9.7201690 |
| 43 | 46509.96 | 52538.29 | 112961.37 | 9.6675459 | 9.7204759 |
| 44 | 46535.71 | 52575.41 | 112978.64 | 9.6677863 | 9.7207827 |
| 45 | 46561.45 | 52612.54 | 112995.93 | 9.6680265 | 9.7210893 |
| 46 | 46587.19 | 52649.69 | 113013.23 | 9.6682665 | 9.7213958 |
| 47 | 46612.93 | 52686.85 | 113030.55 | 9.6685064 | 9.7217022 |
| 48 | 46638.66 | 52724.02 | 113047.88 | 9.6687461 | 9.7220085 |
| 49 | 46664.39 | 52761.20 | 113065.22 | 9.6689856 | 9.7223147 |
| 50 | 46690.12 | 52798.39 | 113082.58 | 9.6692250 | 9.7226207 |
| 51 | 46715.84 | 52835.59 | 113099.96 | 9.6694642 | 9.7229266 |
| 52 | 46741.56 | 52872.81 | 113117.35 | 9.6697032 | 9.7232324 |
| 53 | 46767.27 | 52910.04 | 113134.75 | 9.6699420 | 9.7235381 |
| 54 | 46792.98 | 52947.27 | 113152.17 | 9.6701807 | 9.7238436 |
| 55 | 46818.69 | 52984.52 | 113169.61 | 9.6704192 | 9.7241490 |
| 56 | 46844.39 | 53021.78 | 113187.06 | 9.6706576 | 9.7244543 |
| 57 | 46870.09 | 53059.06 | 113204.52 | 9.6708958 | 9.7247595 |
| 58 | 46895.78 | 53096.34 | 113222.00 | 9.6711338 | 9.7250646 |
| 59 | 46921.47 | 53133.64 | 113239.50 | 9.6713716 | 9.7253695 |
| 60 | 46947.16 | 53170.94 | 113257.01 | 9.6716093 | 9.7256744 |

# 62 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan.* |
|---|---|---|---|---|---|
| 30 | 88701.08 | 192098.21 | 216568.06 | 9.9479289 | 10.2835233 |
| 29 | 88687.64 | 191961.86 | 216447.12 | 9.9478631 | 10.2832149 |
| 28 | 88674.20 | 191825.65 | 216326.33 | 9.9477973 | 10.2829067 |
| 27 | 88660.75 | 191689.60 | 216205.70 | 9.9477314 | 10.2825986 |
| 26 | 88647.29 | 191553.70 | 216085.22 | 9.9476655 | 10.2822906 |
| 25 | 88633.83 | 191417.95 | 215964.89 | 9.9475995 | 10.2819827 |
| 24 | 88620.36 | 191282.36 | 215844.71 | 9.9475335 | 10.2816749 |
| 23 | 88606.88 | 191146.91 | 215724.69 | 9.9474674 | 10.2813673 |
| 22 | 88593.39 | 191011.62 | 215604.82 | 9.9474013 | 10.2810598 |
| 21 | 88579.89 | 190876.47 | 215485.10 | 9.9473352 | 10.2807524 |
| 20 | 88566.39 | 190741.47 | 215365.53 | 9.9472689 | 10.2804451 |
| 19 | 88552.88 | 190606.63 | 215246.11 | 9.9472027 | 10.2801380 |
| 18 | 88539.36 | 190471.93 | 215126.84 | 9.9471364 | 10.2798310 |
| 17 | 88525.83 | 190337.38 | 215007.72 | 9.9470700 | 10.2795241 |
| 16 | 88512.30 | 190202.99 | 214888.75 | 9.9470036 | 10.2792173 |
| 15 | 88498.76 | 190068.74 | 214769.93 | 9.9469372 | 10.2789107 |
| 14 | 88485.21 | 189934.64 | 214651.27 | 9.9468707 | 10.2786042 |
| 13 | 88471.66 | 189800.68 | 214532.75 | 9.9468042 | 10.2782978 |
| 12 | 88458.10 | 189666.88 | 214414.37 | 9.9467376 | 10.2779915 |
| 11 | 88444.53 | 189533.22 | 214296.15 | 9.9466710 | 10.2776853 |
| 10 | 88430.95 | 189399.71 | 214178.08 | 9.9466043 | 10.2773793 |
| 9 | 88417.36 | 189256.34 | 214060.15 | 9.9465376 | 10.2770734 |
| 8 | 88403.77 | 189133.13 | 213942.38 | 9.9464708 | 10.2767676 |
| 7 | 88390.17 | 189000.06 | 213824.75 | 9.9464040 | 10.2764619 |
| 6 | 88376.56 | 188867.13 | 213707.26 | 9.9463371 | 10.2761564 |
| 5 | 88362.94 | 188734.36 | 213589.93 | 9.9462702 | 10.2758510 |
| 4 | 88349.32 | 188601.72 | 213472.74 | 9.9462032 | 10.2755457 |
| 3 | 88335.69 | 188469.24 | 213355.70 | 9.9461362 | 10.2752405 |
| 2 | 88322.05 | 188336.90 | 213238.80 | 9.9460692 | 10.2749354 |
| 1 | 88308.41 | 188204.70 | 213122.05 | 9.9460021 | 10.2746305 |
| 0 | 88294.76 | 188072.65 | 213005.45 | 9.9459349 | 10.2743256 |

# 28 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 46947.16 | 53170.94 | 113257.01 | 9.6716093 | 9.7256744 |
| 1 | 46972.84 | 53208.26 | 113274.53 | 9.6718468 | 9.7259791 |
| 2 | 46998.52 | 53245.59 | 113292.07 | 9.6720841 | 9.7262837 |
| 3 | 47024.19 | 53282.93 | 113309.62 | 9.6723213 | 9.7265881 |
| 4 | 47049.86 | 53320.29 | 113327.19 | 9.6725583 | 9.7268925 |
| 5 | 47075.53 | 53357.65 | 113344.78 | 9.6727952 | 9.7271967 |
| 6 | 47101.19 | 53395.03 | 113362.38 | 9.6730319 | 9.7275008 |
| 7 | 47126.85 | 53432.42 | 113379.99 | 9.6732684 | 9.7278048 |
| 8 | 47152.50 | 53469.82 | 113397.62 | 9.6735047 | 9.7281087 |
| 9 | 47178.15 | 53507.23 | 113415.27 | 9.6737409 | 9.7284124 |
| 10 | 47203.80 | 53544.65 | 113432.93 | 9.6739769 | 9.7287161 |
| 11 | 47229.44 | 53582.08 | 113450.90 | 9.6742128 | 9.7290196 |
| 12 | 47255.08 | 53619.53 | 113468.29 | 9.6744485 | 9.7293230 |
| 13 | 47280.71 | 53656.99 | 113486.00 | 9.6746840 | 9.7296263 |
| 14 | 47306.34 | 53694.46 | 113503.72 | 9.6749194 | 9.7299295 |
| 15 | 47331.97 | 53731.94 | 113521.46 | 9.6751346 | 9.7302325 |
| 16 | 47357.59 | 53769.43 | 113539.21 | 9.6753896 | 9.7305354 |
| 17 | 47383.21 | 53806.94 | 113556.98 | 9.6756245 | 9.7308383 |
| 18 | 47408.82 | 53844.45 | 113574.76 | 9.6758592 | 9.7311410 |
| 19 | 47434.43 | 53881.98 | 113592.55 | 9.6760937 | 9.7314436 |
| 20 | 47460.04 | 53919.52 | 113610.36 | 9.6763281 | 9.7317460 |
| 21 | 47485.64 | 53957.07 | 113628.19 | 9.6765623 | 9.7320484 |
| 22 | 47511.24 | 53994.64 | 113646.03 | 9.6767963 | 9.7323506 |
| 23 | 47536.83 | 54032.21 | 113663.89 | 9.6770302 | 9.7326527 |
| 24 | 47562.42 | 54069.80 | 113681.76 | 9.6772640 | 9.7329547 |
| 25 | 47588.01 | 54107.40 | 113699.65 | 9.6774975 | 9.7332566 |
| 26 | 47613.59 | 54145.01 | 113717.55 | 9.6777309 | 9.7335584 |
| 27 | 47639.17 | 54182.63 | 113735.47 | 9.6779642 | 9.7338601 |
| 28 | 47664.74 | 54220.27 | 113753.40 | 9.6781972 | 9.7341616 |
| 29 | 47690.31 | 54257.91 | 113771.35 | 9.6784301 | 9.7344631 |
| 30 | 47715.88 | 54295.57 | 113789.32 | 9.6786629 | 9.7347644 |

# 61 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 88294.76 | 188072.65 | 213005.45 | 9.9459349 | 10.2743256 |
| 59 | 88281.10 | 187940.74 | 212888.99 | 9.9458677 | 10.2740209 |
| 58 | 88267.43 | 187808.98 | 212772.67 | 9.9458005 | 10.2737163 |
| 57 | 88253.75 | 187677.36 | 212656.51 | 9.9457332 | 10.2734119 |
| 56 | 88240.07 | 187545.88 | 212540.48 | 9.9456659 | 10.2731075 |
| 55 | 88226.38 | 187414.55 | 212424.60 | 9.9455985 | 10.2728033 |
| 54 | 88212.68 | 187283.36 | 212308.87 | 9.9455310 | 10.2724992 |
| 53 | 88198.98 | 187152.31 | 212193.28 | 9.9454636 | 10.2721952 |
| 52 | 88185.27 | 187021.41 | 212077.83 | 9.9453960 | 10.2718913 |
| 51 | 88171.55 | 186890.64 | 211962.53 | 9.9453285 | 10.2715876 |
| 50 | 88157.82 | 186760.03 | 211847.37 | 9.9452609 | 10.2712839 |
| 49 | 88144.09 | 186629.55 | 211732.35 | 9.9451932 | 10.2709804 |
| 48 | 88130.35 | 186499.21 | 211617.48 | 9.9451255 | 10.2706770 |
| 47 | 88116.60 | 186369.02 | 211502.74 | 9.9450577 | 10.2703737 |
| 46 | 88102.84 | 186238.96 | 211388.15 | 9.9449899 | 10.2700705 |
| 45 | 88089.07 | 186109.05 | 211273.71 | 9.9449220 | 10.2697675 |
| 44 | 88075.30 | 185979.28 | 211159.40 | 9.9448541 | 10.2694646 |
| 43 | 88061.52 | 185849.65 | 211045.23 | 9.9447862 | 10.2691617 |
| 42 | 88047.73 | 185720.15 | 210931.21 | 9.9447182 | 10.2688590 |
| 41 | 88033.94 | 185590.80 | 210817.33 | 9.9446501 | 10.2685564 |
| 40 | 88020.14 | 185461.59 | 210703.59 | 9.9445821 | 10.2682540 |
| 39 | 88006.33 | 185332.52 | 210589.98 | 9.9445139 | 10.2679516 |
| 38 | 87992.51 | 185203.58 | 210476.52 | 9.9444457 | 10.2676494 |
| 37 | 87978.69 | 185074.79 | 210363.20 | 9.9443775 | 10.2673473 |
| 36 | 87964.86 | 184946.13 | 210250.02 | 9.9443092 | 10.2670453 |
| 35 | 87951.02 | 184817.61 | 210136.98 | 9.9442409 | 10.2667434 |
| 34 | 87937.17 | 184689.23 | 210024.08 | 9.9441725 | 10.2664416 |
| 33 | 87923.32 | 184560.99 | 209911.31 | 9.9441041 | 10.2661399 |
| 32 | 87909.46 | 184432.89 | 209798.69 | 9.9440356 | 10.2658384 |
| 31 | 87895.59 | 184304.92 | 209686.20 | 9.9439671 | 10.2655369 |
| 30 | 87881.71 | 184177.09 | 209573.85 | 9.9438985 | 10.2652356 |

## 28 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan* |
|---|---|---|---|---|---|
| 30 | 47715.88 | 54295.57 | 113789.32 | 9.6786629 | 9.7347644 |
| 31 | 47741.44 | 54333.24 | 113807.30 | 9.6788955 | 9.7350656 |
| 32 | 47797.00 | 54370.92 | 113825.29 | 9.6791279 | 9.7353667 |
| 33 | 47792.55 | 54408.62 | 113843.30 | 9.6793602 | 9.7356677 |
| 34 | 47818.10 | 54446.32 | 113861.33 | 9.6795923 | 9.7359685 |
| 35 | 47843.64 | 54484.04 | 113879.37 | 9.6798243 | 9.7362693 |
| 36 | 47869.18 | 54521.77 | 113897.43 | 9.6800560 | 9.7365699 |
| 37 | 47894.72 | 54559.51 | 113915.50 | 9.6802877 | 9.7368705 |
| 38 | 47920.26 | 54597.26 | 113933.59 | 9.6805191 | 9.7371709 |
| 39 | 47945.79 | 54635.03 | 113951.69 | 9.6807504 | 9.7374712 |
| 40 | 47971.31 | 54672.81 | 113969.81 | 9.6809816 | 9.7377714 |
| 41 | 47996.83 | 54710.60 | 113987.94 | 9.6812126 | 9.7380715 |
| 42 | 48022.35 | 54748.40 | 114006.09 | 9.6814434 | 9.7383714 |
| 43 | 48047.86 | 54786.21 | 114024.25 | 9.6816741 | 9.7386713 |
| 44 | 48073.37 | 54824.04 | 114042.43 | 9.6819046 | 9.7389710 |
| 45 | 48098.88 | 54861.88 | 114060.62 | 9.6821349 | 9.7392707 |
| 46 | 48124.38 | 54899.73 | 114078.83 | 9.6823651 | 9.7395702 |
| 47 | 48149.88 | 54937.59 | 114097.06 | 9.6825952 | 9.7398696 |
| 48 | 48175.37 | 54975.46 | 114115.30 | 9.6828250 | 9.7401689 |
| 49 | 48200.86 | 55013.35 | 114133.56 | 9.6830548 | 9.7404681 |
| 50 | 48226.34 | 55051.25 | 114151.83 | 9.6832843 | 9.7407672 |
| 51 | 48251.82 | 55089.16 | 114170.12 | 9.6835137 | 9.7410662 |
| 52 | 48277.30 | 55127.08 | 114188.42 | 9.6837430 | 9.7413650 |
| 53 | 48302.77 | 55165.02 | 114206.74 | 9.6839720 | 9.7416638 |
| 54 | 48328.24 | 55202.97 | 114225.07 | 9.6842010 | 9.7419624 |
| 55 | 48353.70 | 55240.93 | 114243.42 | 9.6844297 | 9.7422609 |
| 56 | 48379.16 | 55278.90 | 114261.79 | 9.6846583 | 9.7425594 |
| 57 | 48404.62 | 55316.88 | 114280.17 | 9.6848868 | 9.7428577 |
| 58 | 48430.07 | 55354.88 | 114298.57 | 9.6851151 | 9.7431559 |
| 59 | 48455.52 | 55392.88 | 114316.98 | 9.6853432 | 9.7434540 |
| 60 | 48480.96 | 55430.90 | 114335.41 | 9.6855712 | 9.7437520 |

# 61 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 87881.71 | 184177.09 | 209573.85 | 9.9438985 | 10.2652356 |
| 29 | 87867.83 | 184049.39 | 209461.64 | 9.9438299 | 10.2649344 |
| 28 | 87853.94 | 183921.84 | 209349.57 | 9.9437612 | 10.2646333 |
| 27 | 87840.04 | 183794.42 | 209237.64 | 9.9436925 | 10.2643323 |
| 26 | 87826.13 | 183667.13 | 209125.84 | 9.9436238 | 10.2640315 |
| 25 | 87812.22 | 183539.99 | 209014.18 | 9.9435549 | 10.2637307 |
| 24 | 87798.30 | 183412.97 | 208902.65 | 9.9434861 | 10.2634301 |
| 23 | 87784.37 | 183286.10 | 208791.27 | 9.9434172 | 10.2631295 |
| 22 | 87770.43 | 183159.36 | 208680.02 | 9.9433482 | 10.2628291 |
| 21 | 87756.49 | 183032.75 | 208568.90 | 9.9432792 | 10.2625288 |
| 20 | 87742.54 | 182906.28 | 208457.92 | 9.9432102 | 10.2622286 |
| 19 | 87728.58 | 182779.94 | 208347.08 | 9.9431411 | 10.2619285 |
| 18 | 87714.61 | 182653.74 | 208236.37 | 9.9430720 | 10.2616286 |
| 17 | 87700.64 | 182527.67 | 208125.80 | 9.9430028 | 10.2613287 |
| 16 | 87686.66 | 182401.73 | 208015.36 | 9.9429335 | 10.2610290 |
| 15 | 87672.67 | 182275.93 | 207905.06 | 9.6428643 | 10.2607293 |
| 14 | 87658.68 | 182150.26 | 207794.89 | 9.9427949 | 10.2604298 |
| 13 | 87644.68 | 182024.73 | 207684.86 | 9.9427255 | 10.2601304 |
| 12 | 87630.67 | 181899.32 | 207574.96 | 9.9426561 | 10.2598311 |
| 11 | 87616.65 | 181774.05 | 207465.19 | 9.9425866 | 10.2595319 |
| 10 | 87602.62 | 181648.92 | 207355.56 | 9.9425171 | 10.2592328 |
| 9 | 87588.59 | 181523.91 | 207246.06 | 9.9424476 | 10.2589338 |
| 8 | 87574.55 | 181399.04 | 207136.70 | 9.9423779 | 10.2586350 |
| 7 | 87560.50 | 181274.30 | 207027.46 | 9.9423083 | 10.2583362 |
| 6 | 87546.45 | 181149.69 | 206918.36 | 9.9422386 | 10.2580376 |
| 5 | 87532.39 | 181025.21 | 206809.40 | 9.9421688 | 10.2577391 |
| 4 | 87518.32 | 180900.86 | 206700.56 | 9.9420990 | 10.2574406 |
| 3 | 87504.24 | 180776.64 | 206591.86 | 9.9420291 | 10.2571423 |
| 2 | 87490.16 | 180652.56 | 206483.28 | 9.9419592 | 10.2568441 |
| 1 | 87476.07 | 180528.60 | 206374.84 | 9.9418893 | 10.2565460 |
| 0 | 87461.97 | 180404.78 | 206266.53 | 9.9418193 | 10.2562480 |

# 29 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 48480.96 | 55430.90 | 114335.41 | 9.6855712 | 9.7437520 |
| 1 | 48506.40 | 55468.94 | 114353.85 | 9.6857991 | 9.7440499 |
| 2 | 48531.84 | 55506.98 | 114372.31 | 9.6860267 | 9.7443476 |
| 3 | 48557.27 | 55545.04 | 114390.78 | 9.6862542 | 9.7446453 |
| 4 | 48582.70 | 55583.11 | 114409.27 | 9.6864816 | 9.7449428 |
| 5 | 48608.12 | 55621.19 | 114427.78 | 9.6867088 | 9.7452403 |
| 6 | 48633.54 | 55659.29 | 114446.30 | 9.6869359 | 9.7455376 |
| 7 | 48658.95 | 55697.39 | 114464.84 | 9.6871628 | 9.7458349 |
| 8 | 48684.36 | 55735.51 | 114483.39 | 9.6873895 | 9.7461320 |
| 9 | 48709.77 | 55773.64 | 114501.96 | 9.6876161 | 9.7464290 |
| 10 | 48735.17 | 55811.79 | 114520.55 | 9.6878425 | 9.7467259 |
| 11 | 48760.57 | 55849.94 | 114539.15 | 9.6880688 | 9.7470227 |
| 12 | 48785.97 | 55888.11 | 114557.76 | 9.6882949 | 9.7473194 |
| 13 | 48811.36 | 55926.29 | 114576.39 | 9.6885209 | 9.7476160 |
| 14 | 48836.74 | 55964.48 | 114595.04 | 9.6887467 | 9.7479125 |
| 15 | 48862.12 | 56002.69 | 114613.70 | 9.6889723 | 9.7482089 |
| 16 | 48887.50 | 56040.91 | 114632.38 | 9.6891978 | 9.7485052 |
| 17 | 48912.87 | 56079.14 | 114651.08 | 9.6894232 | 9.7488013 |
| 18 | 48938.24 | 56117.38 | 114669.79 | 9.6896484 | 9.7490974 |
| 19 | 48963.61 | 56155.64 | 114688.52 | 9.6898734 | 9.7493934 |
| 20 | 48988.97 | 56193.91 | 114707.26 | 9.6900983 | 9.7496892 |
| 21 | 49014.33 | 56232.19 | 114726.02 | 9.6903231 | 9.7499850 |
| 22 | 49039.68 | 56270.48 | 114744.79 | 9.6905476 | 9.7502806 |
| 23 | 49065.03 | 56308.79 | 114763.58 | 9.6907721 | 9.7505762 |
| 24 | 49090.37 | 56347.10 | 114782.39 | 9.6909964 | 9.7508716 |
| 25 | 49115.71 | 56385.43 | 114801.21 | 9.6912205 | 9.7511669 |
| 26 | 49141.05 | 56423.78 | 114820.05 | 9.6914445 | 9.7514622 |
| 27 | 49166.38 | 56462.13 | 114838.90 | 9.6916683 | 9.7517573 |
| 28 | 49191.71 | 56500.50 | 114857.77 | 9.6918919 | 9.7520523 |
| 29 | 49217.04 | 56538.88 | 114876.65 | 9.6921155 | 9.7523472 |
| 30 | 49242.36 | 56577.28 | 114895.55 | 9.6923388 | 9.7526420 |

## 60 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan. |
|---|---|---|---|---|---|
| 60 | 87461.97 | 180404.78 | 206266.53 | 9.9418193 | 10.2562480 |
| 59 | 87447.86 | 180281.08 | 206158.36 | 9.9417492 | 10.2559501 |
| 58 | 87433.75 | 180157.51 | 206050.31 | 9.9416791 | 10.2556524 |
| 57 | 87419.63 | 180034.08 | 205942.39 | 9.9416090 | 10.2553547 |
| 56 | 87405.50 | 179910.77 | 205834.60 | 9.9415388 | 10.2550572 |
| 55 | 87391.36 | 179787.59 | 205726.95 | 9.9414685 | 10.2547597 |
| 54 | 87377.22 | 179664.54 | 205619.42 | 9.9413982 | 10.2544624 |
| 53 | 87363.07 | 179541.62 | 205512.03 | 9.9413279 | 10.2541651 |
| 52 | 87348.91 | 179418.83 | 205404.76 | 9.9412575 | 10.2538680 |
| 51 | 87334.75 | 179296.16 | 205297.62 | 9.9411871 | 10.2535710 |
| 50 | 87320.58 | 179173.62 | 205190.61 | 9.9411166 | 10.2532741 |
| 49 | 87306.40 | 179051.21 | 205083.73 | 9.9410461 | 10.2529773 |
| 48 | 87292.21 | 178928.93 | 204976.98 | 9.9409755 | 10.2526806 |
| 47 | 87278.01 | 178806.78 | 204870.36 | 9.9409048 | 10.2523840 |
| 46 | 87263.81 | 178684.75 | 204763.86 | 9.9408342 | 10.2520875 |
| 45 | 87249.60 | 178562.85 | 204657.50 | 9.9407634 | 10.2517911 |
| 44 | 87235.38 | 178441.07 | 204551.26 | 9.9406927 | 10.2514948 |
| 43 | 87221.16 | 178319.43 | 204445.15 | 9.9406219 | 10.2511987 |
| 42 | 87206.93 | 178197.90 | 294339.16 | 9.9405510 | 10.2509026 |
| 41 | 87192.69 | 178076.51 | 204233.30 | 9.9404801 | 10.2506066 |
| 40 | 87178.44 | 177955.24 | 204127.57 | 9.9404091 | 10.2503108 |
| 39 | 87164.19 | 177834.09 | 204021.97 | 9.9403381 | 10.2500150 |
| 38 | 87149.93 | 177713.07 | 203916.49 | 9.9402670 | 10.2497194 |
| 37 | 87135.66 | 177592.18 | 203811.14 | 9.9401959 | 10.2494238 |
| 36 | 87121.38 | 177471.41 | 203705.92 | 9.9401248 | 10.2491284 |
| 35 | 87107.10 | 177350.76 | 203600.82 | 9.9400535 | 10.2488331 |
| 34 | 87092.81 | 177230.24 | 203495.85 | 9.9399823 | 10.2485378 |
| 33 | 87078.51 | 177109.85 | 203391.00 | 9.9399110 | 10.2482427 |
| 32 | 87064.20 | 176989.58 | 203286.27 | 9.9398396 | 10.2479477 |
| 31 | 87049.89 | 176869.43 | 203181.68 | 9.9397682 | 10.2476528 |
| 30 | 87035.57 | 176749.40 | 203077.20 | 9.9396968 | 10.2473580 |

# 29 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 49242.36 | 55577.28 | 114895.55 | 9.6923388 | 9.7526420 |
| 31 | 49267.07 | 56[illegible]5.68 | 1149[illegible]4.47 | 9.6925620 | 9.7529368 |
| 32 | 49292.98 | 56[illegible]4.10 | 114933.40 | 9.6927851 | 9.7532314 |
| 33 | 493[illegible]8.29 | 56692.53 | 114952.35 | 9.6930080 | 9.7535259 |
| 34 | 49343.59 | 5673[illegible].98 | 114971.32 | 9.6932308 | 9.7538203 |
| 35 | 49368.89 | 56769.44 | 114990.30 | 9.6934534 | 9.7541146 |
| 36 | 49394.19 | 56807.91 | 115009.30 | 9.6936758 | 9.7544088 |
| 37 | 49419.48 | 56846.39 | 115028.31 | 9.[illegible]93896[illegible] | 9.7547029 |
| 38 | 49444.77 | 56884.88 | 115047.34 | 9.6941203 | 9.75499[illegible]9 |
| 39 | 49470.05 | 56923.39 | 115066.38 | 9.6943423 | 9.7552908 |
| 40 | 49495.33 | 56961.91 | 1150[illegible]5.44 | 9.6945642 | 9.7555846 |
| 41 | 49520.60 | 57000.45 | 115104.52 | 9.6947859 | 9.7558783 |
| 42 | 49545.87 | 57038.99 | 115123.61 | 9.6950074 | 9.7561718 |
| 43 | 49571.13 | 57077.55 | 115142.72 | 9.6952288 | 9.7564653 |
| 44 | 49596.39 | 57116.12 | 115161.85 | 9.6954501 | 9.7567587 |
| 45 | 49621.65 | 57154.7[illegible] | 115180.99 | 9.6956712 | 9.7570520 |
| 46 | 49646.90 | 57193.31 | 115200.15 | 9.6958922 | 9.7573452 |
| 47 | 49672.15 | 57231.92 | 115219.32 | 9.6961130 | 9.7576383 |
| 48 | 49697.40 | 57270.54 | 115238.51 | 9.6963336 | 9.7579313 |
| 49 | 49722.64 | 57309.18 | 115257.72 | 9.6965541 | 9.7582242 |
| 50 | 49747.87 | 57347.83 | 115276.94 | 9.6967745 | 9.7585170 |
| 51 | 49773.10 | 57386.49 | 115296.18 | 9.6969947 | 9.7588096 |
| 52 | 49798.33 | 5742[illegible].16 | 115315.43 | 9.6972148 | 9.7591022 |
| 53 | 49823.55 | 57463.85 | 115334.70 | 9.6974347 | 9.7593947 |
| 54 | 49848.77 | 57502.55 | 115353.99 | 9.6976545 | 9.7596871 |
| 55 | 49873.99 | 57541.26 | 115373.29 | 9.6978741 | 9.7599794 |
| 56 | 49899.20 | 57579.99 | 115392.61 | 9.6980936 | 9.7602716 |
| 57 | 49924.4[illegible] | 57618.73 | 115411.95 | 9.6983129 | 9.7605637 |
| 58 | 49949.61 | 57657.48 | 115431.30 | 9.6985321 | 9.7608557 |
| 59 | 49974.81 | 57696.25 | 115450.67 | 9.6987511 | 9.7611476 |
| 60 | 50000.00 | 57735.03 | 115470.05 | 9.6989700 | 9.7614394 |

# 60 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 87035.57 | 176749.40 | 203077.20 | 9.9396968 | 10.2473580 |
| 29 | 87021.24 | 176629.50 | 202972.86 | 9.9396253 | 10.2470632 |
| 28 | 87006.90 | 176509.72 | 202868.63 | 9.9395537 | 10.2467686 |
| 27 | 86992.56 | 176390.07 | 202764.53 | 9.9394821 | 10.2464741 |
| 26 | 86978.21 | 176270.53 | 202660.56 | 9.9394105 | 10.2461797 |
| 25 | 86963.85 | 176151.12 | 202556.70 | 9.9393388 | 10.2458854 |
| 24 | 86949.49 | 176031.83 | 202452.97 | 9.9392671 | 10.2455912 |
| 23 | 86935.12 | 175912.67 | 202349.37 | 9.9391953 | 10.2452971 |
| 22 | 86920.74 | 175793.62 | 202245.89 | 9.9391234 | 10.2450031 |
| 21 | 86906.35 | 175674.70 | 202142.53 | 9.9390515 | 10.2447092 |
| 20 | 86891.96 | 175555.90 | 202039.29 | 9.9389796 | 10.2444154 |
| 19 | 86877.56 | 175437.22 | 201936.17 | 9.9389076 | 10.2441217 |
| 18 | 86863.15 | 175318.66 | 201833.18 | 9.9388356 | 10.2438282 |
| 17 | 86848.73 | 175200.23 | 201730.31 | 9.9387635 | 10.2435347 |
| 16 | 86834.31 | 175081.91 | 201627.56 | 9.9386914 | 10.2432413 |
| 15 | 86819.88 | 174963.71 | 201524.94 | 9.9386192 | 10.2429480 |
| 14 | 86805.44 | 174845.64 | 201422.43 | 9.9385470 | 10.2426548 |
| 13 | 86791.00 | 174727.68 | 201320.05 | 9.9384747 | 10.2423617 |
| 12 | 86776.55 | 174609.84 | 201217.79 | 9.9384024 | 10.2420687 |
| 11 | 86762.09 | 174492.13 | 201115.64 | 9.9383300 | 10.2417758 |
| 10 | 86747.62 | 174374.53 | 201013.62 | 9.9382576 | 10.2414830 |
| 9 | 86733.14 | 174257.05 | 200911.72 | 9.9381851 | 10.2411904 |
| 8 | 86718.66 | 174139.69 | 200809.94 | 9.9381126 | 10.2408978 |
| 7 | 86704.17 | 174022.45 | 200708.28 | 9.9380400 | 10.2406053 |
| 6 | 86689.67 | 173905.33 | 200606.74 | 9.9379674 | 10.2403129 |
| 5 | 86675.17 | 173788.33 | 200505.32 | 9.9378947 | 10.2400206 |
| 4 | 86660.66 | 173671.44 | 200404.02 | 9.9378220 | 10.2397284 |
| 3 | 86646.14 | 173554.68 | 200302.83 | 9.9377492 | 10.2394363 |
| 2 | 86631.61 | 173438.03 | 200201.77 | 9.9376764 | 10.2391443 |
| 1 | 86617.08 | 173321.49 | 200100.83 | 9.9376035 | 10.2388524 |
| 0 | 86602.54 | 173205.08 | 200000.00 | 9.9375306 | 10.2385606 |

# 30 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 50000.00 | 57735.03 | 115470.05 | 9.6989700 | 9.7614394 |
| 1 | 50025.19 | 57773.82 | 115489.45 | 9.6991887 | 9.7617311 |
| 2 | 50050.38 | 57812.62 | 115508.87 | 9.6994073 | 9.7620227 |
| 3 | 50075.56 | 57851.44 | 115528.30 | 9.6996258 | 9.7623142 |
| 4 | 50100.74 | 57890.27 | 115547.75 | 9.6998441 | 9.7626056 |
| 5 | 50125.91 | 57929.11 | 115567.22 | 9.7000622 | 9.7628969 |
| 6 | 50151.08 | 57967.97 | 115586.70 | 9.7002802 | 9.7631881 |
| 7 | 50176.24 | 58006.84 | 115606.20 | 9.7004981 | 9.7634792 |
| 8 | 50201.40 | 58045.73 | 115625.72 | 9.7007158 | 9.7637702 |
| 9 | 50226.55 | 58084.62 | 115645.25 | 9.7009334 | 9.7640612 |
| 10 | 50251.70 | 58123.53 | 115664.80 | 9.7011508 | 9.7643520 |
| 11 | 50276.85 | 58162.45 | 115684.36 | 9.7013681 | 9.7646427 |
| 12 | 50301.99 | 58201.39 | 115703.94 | 9.7015852 | 9.7649334 |
| 13 | 50327.13 | 58240.34 | 115723.54 | 9.7018022 | 9.7652239 |
| 14 | 50352.27 | 58279.30 | 115743.15 | 9.7020190 | 9.7655143 |
| 15 | 50377.40 | 58318.28 | 115762.78 | 9.7022357 | 9.7658047 |
| 16 | 50402.53 | 58357.27 | 115782.43 | 9.7024523 | 9.7660949 |
| 17 | 50427.65 | 58396.27 | 115802.09 | 9.7026687 | 9.7663851 |
| 18 | 50452.77 | 58435.28 | 115821.77 | 9.7028849 | 9.7666751 |
| 19 | 50477.88 | 58474.31 | 115841.47 | 9.7031011 | 9.7669651 |
| 20 | 50502.99 | 58513.35 | 115861.18 | 9.7033170 | 9.7672550 |
| 21 | 50528.09 | 58552.41 | 115880.91 | 9.7035329 | 9.7675448 |
| 22 | 50553.19 | 58591.48 | 115900.65 | 9.7037486 | 9.7678344 |
| 23 | 50578.28 | 58630.56 | 115920.41 | 9.7039641 | 9.7681240 |
| 24 | 50603.37 | 58669.65 | 115940.19 | 9.7041795 | 9.7684135 |
| 25 | 50628.46 | 58708.76 | 115959.99 | 9.7043947 | 9.7687029 |
| 26 | 50653.55 | 58747.88 | 115979.80 | 9.7046099 | 9.7689922 |
| 27 | 50678.63 | 58787.02 | 115999.63 | 9.7048248 | 9.7692814 |
| 28 | 50703.70 | 58826.17 | 116019.47 | 9.7050397 | 9.7695705 |
| 29 | 50728.77 | 58865.33 | 116039.33 | 9.7052543 | 9.7698596 |
| 30 | 50753.84 | 58904.50 | 116059.21 | 9.7054689 | 9.7701485 |

# 59 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 86602.54 | 173205.08 | 200000.00 | 9.9375306 | 10.2385606 |
| 59 | 86587.99 | 173088.78 | 199899.29 | 9.9374577 | 10.2382689 |
| 58 | 86573.43 | 172972.60 | 199798.70 | 9.9373847 | 10.2379773 |
| 57 | 86558.87 | 172856.54 | 199698.23 | 9.9373116 | 10.2376858 |
| 56 | 86544.30 | 172740.60 | 199597.88 | 9.9372385 | 10.2373944 |
| 55 | 86529.72 | 172624.77 | 199497.64 | 9.9371653 | 10.2371031 |
| 54 | 86515.14 | 172509.05 | 199397.53 | 9.9370921 | 10.2368119 |
| 53 | 86500.55 | 172393.45 | 199297.52 | 9.9370189 | 10.2365208 |
| 52 | 86485.95 | 172277.97 | 199197.64 | 9.9369456 | 10.2362298 |
| 51 | 86471.34 | 172162.61 | 199097.87 | 9.9368722 | 10.2359388 |
| 50 | 86456.73 | 172047.36 | 198998.22 | 9.9367988 | 10.2356480 |
| 49 | 86442.11 | 171932.22 | 198898.69 | 9.9367254 | 10.2353573 |
| 48 | 86427.48 | 171817.20 | 198799.27 | 9.9366519 | 10.2350666 |
| 47 | 86412.84 | 171702.30 | 198699.97 | 9.9365783 | 10.2347761 |
| 46 | 86398.20 | 171587.51 | 198600.80 | 9.9365047 | 10.2344857 |
| 45 | 86383.55 | 171472.83 | 198501.72 | 9.9364311 | 10.2341953 |
| 44 | 86368.89 | 171358.27 | 198402.76 | 9.9363574 | 10.2339051 |
| 43 | 86354.23 | 171243.82 | 198303.93 | 9.9362836 | 10.2336149 |
| 42 | 86339.56 | 171129.49 | 198205.20 | 9.9362098 | 10.2333249 |
| 41 | 86324.88 | 171015.27 | 198106.59 | 9.9361360 | 10.2330349 |
| 40 | 86310.19 | 170901.16 | 198008.10 | 9.9360621 | 10.2327450 |
| 39 | 86295.49 | 170787.17 | 197909.72 | 9.9359881 | 10.2324552 |
| 38 | 86280.79 | 170673.29 | 197811.46 | 9.9359141 | 10.2321656 |
| 37 | 86265.08 | 170559.53 | 197713.31 | 9.9358401 | 10.2318760 |
| 36 | 86251.36 | 170445.87 | 197615.27 | 9.9357660 | 10.2315865 |
| 35 | 86236.64 | 170332.33 | 197517.35 | 9.9356918 | 10.2312971 |
| 34 | 86221.91 | 170218.90 | 197419.54 | 9.9356177 | 10.2310078 |
| 33 | 86207.17 | 170105.59 | 197321.85 | 9.9355434 | 10.2307186 |
| 32 | 86192.43 | 169992.38 | 197224.26 | 9.9354691 | 10.2304295 |
| 31 | 86177.68 | 169879.29 | 197126.80 | 9.9353948 | 10.2301404 |
| 30 | 86162.92 | 169766.31 | 197029.44 | 9.9353204 | 10.2298515 |

# 30 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan* |
|---|---|---|---|---|---|
| 30 | 50753.84 | 58904.50 | 116059.21 | 9.7054689 | 9.7701485 |
| 31 | 50778.90 | 58943.69 | 116079.11 | 9.7056833 | 9.7704373 |
| 32 | 50803.96 | 58982.89 | 116099.02 | 9.7058975 | 9.7707261 |
| 33 | 50829.01 | 59022.11 | 116118.95 | 9.7061116 | 9.7710147 |
| 34 | 50854.06 | 59061.34 | 116138.89 | 9.7063256 | 9.7713033 |
| 35 | 50879.10 | 59100.58 | 116158.85 | 9.7065394 | 9.7715917 |
| 36 | 50904.14 | 59139.83 | 116178.83 | 9.7067531 | 9.7718801 |
| 37 | 50929.18 | 59179.10 | 116198.82 | 9.7069667 | 9.7721684 |
| 38 | 50954.21 | 59218.39 | 116218.83 | 9.7071801 | 9.7724566 |
| 39 | 50979.24 | 59257.68 | 116238.86 | 9.7073933 | 9.7727447 |
| 40 | 51004.26 | 59296.99 | 116258.91 | 9.7076064 | 9.7730327 |
| 41 | 51029.28 | 59336.32 | 116278.97 | 9.7078194 | 9.7733206 |
| 42 | 51054.29 | 59375.66 | 116299.05 | 9.7080323 | 9.7736084 |
| 43 | 51079.30 | 59415.01 | 116319.14 | 9.7082450 | 9.7738961 |
| 44 | 51104.31 | 59454.37 | 116339.25 | 9.7084575 | 9.7741838 |
| 45 | 51129.31 | 59493.75 | 116359.38 | 9.7086699 | 9.7744713 |
| 46 | 51154.31 | 59533.14 | 116379.53 | 9.7088822 | 9.7747588 |
| 47 | 51179.30 | 59572.54 | 116399.69 | 9.7090943 | 9.7750462 |
| 48 | 51204.29 | 59611.96 | 116419.87 | 9.7093063 | 9.7753334 |
| 49 | 51229.27 | 59651.40 | 116440.07 | 9.7095182 | 9.7756206 |
| 50 | 51254.25 | 59690.84 | 116460.28 | 9.7097299 | 9.7759077 |
| 51 | 51279.22 | 59730.30 | 116480.51 | 9.7099415 | 9.7761947 |
| 52 | 51304.19 | 59769.78 | 116500.76 | 9.7101529 | 9.7764816 |
| 53 | 51329.16 | 59809.27 | 116521.02 | 9.7103642 | 9.7767685 |
| 54 | 51354.12 | 59848.77 | 116541.30 | 9.7105753 | 9.7770552 |
| 55 | 51379.08 | 59888.28 | 116561.60 | 9.7107863 | 9.7773418 |
| 56 | 51404.04 | 59927.81 | 116581.91 | 9.7109972 | 9.7776284 |
| 57 | 51428.99 | 59967.35 | 116602.24 | 9.7112080 | 9.7779149 |
| 58 | 51453.93 | 60006.91 | 116622.59 | 9.7114186 | 9.7782012 |
| 59 | 51478.87 | 60046.48 | 116642.96 | 9.7116290 | 9.7784875 |
| 60 | 51503.81 | 60086.06 | 116663.34 | 9.7118393 | 9.7787737 |

# 59 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 86162.92 | 169766.31 | 197029.44 | 9.9353204 | 10.2298515 |
| 29 | 86148.15 | 169653.44 | 196932.20 | 9.9352459 | 10.2295627 |
| 28 | 86133.37 | 169540.69 | 196835.07 | 9.9351715 | 10.2292739 |
| 27 | 86118.59 | 169428.04 | 196738.05 | 9.9350969 | 10.2289853 |
| 26 | 86103.80 | 169315.50 | 196641.14 | 9.9350223 | 10.2286967 |
| 25 | 86089.00 | 169203.08 | 196544.34 | 9.9349477 | 10.2284083 |
| 24 | 86074.20 | 169090.77 | 196447.67 | 9.9348730 | 10.2281199 |
| 23 | 86059.39 | 168978.56 | 196351.10 | 9.9347983 | 10.2278316 |
| 22 | 86044.57 | 168866.47 | 196254.64 | 9.9347235 | 10.2275434 |
| 21 | 86029.74 | 168754.49 | 196158.29 | 9.9346486 | 10.2272553 |
| 20 | 86014.91 | 168642.61 | 196062.06 | 9.9345738 | 10.2269673 |
| 19 | 86000.07 | 168530.85 | 195965.93 | 9.9344988 | 10.2266794 |
| 18 | 85985.22 | 168419.19 | 195869.92 | 9.9344238 | 10.2263916 |
| 17 | 85970.37 | 168307.65 | 195774.01 | 9.9343488 | 10.2261039 |
| 16 | 85955.51 | 168196.21 | 195678.22 | 9.9342737 | 10.2258162 |
| 15 | 85940.64 | 168084.89 | 195582.54 | 9.9341986 | 10.2255287 |
| 14 | 85925.76 | 167973.67 | 195486.97 | 9.9341234 | 10.2252412 |
| 13 | 85910.88 | 167862.56 | 195391.50 | 9.9340482 | 10.2249538 |
| 12 | 85895.99 | 167751.56 | 195296.15 | 9.9339729 | 10.2246666 |
| 11 | 85881.09 | 167640.67 | 195200.91 | 9.9338976 | 10.2243794 |
| 10 | 85866.18 | 167529.88 | 195105.77 | 9.9338222 | 10.2240923 |
| 9 | 85851.27 | 167419.21 | 195010.75 | 9.9337467 | 10.2238053 |
| 8 | 85836.35 | 167308.64 | 194915.83 | 9.9336713 | 10.2235184 |
| 7 | 85821.42 | 167198.18 | 194821.02 | 9.9335957 | 10.2232315 |
| 6 | 85806.49 | 167087.82 | 194726.32 | 9.9335201 | 10.2229448 |
| 5 | 85791.55 | 166977.58 | 194631.73 | 9.9334445 | 10.2226582 |
| 4 | 85776.60 | 166867.44 | 194537.25 | 9.9333688 | 10.2223716 |
| 3 | 85761.64 | 166757.41 | 194442.88 | 9.9332931 | 10.2220851 |
| 2 | 85746.68 | 166647.48 | 194348.61 | 9.9332173 | 10.2217988 |
| 1 | 85731.71 | 166537.66 | 194254.45 | 9.9331415 | 10.2215125 |
| 0 | 85716.73 | 166427.95 | 194160.40 | 9.9330656 | 10.2212263 |

# 31 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 51503.81 | 60085.06 | 116663.34 | 9.7118393 | 9.7787737 |
| 1 | 51528.74 | 60125.66 | 116683.74 | 9.7120495 | 9.7790599 |
| 2 | 51553.67 | 60165.27 | 116704.16 | 9.7122596 | 9.7793459 |
| 3 | 51578.59 | 60204.90 | 116724.59 | 9.7124695 | 9.7796318 |
| 4 | 51603.51 | 60244.54 | 116745.04 | 9.7126792 | 9.7799177 |
| 5 | 51628.42 | 60284.19 | 116765.51 | 9.7128889 | 9.7802034 |
| 6 | 51653.33 | 60323.86 | 116785.99 | 9.7130983 | 9.7804891 |
| 7 | 51678.24 | 60363.54 | 116806.49 | 9.7133077 | 9.7807747 |
| 8 | 51703.14 | 60403.23 | 116827.01 | 9.7135169 | 9.7810602 |
| 9 | 51728.04 | 60442.94 | 116847.55 | 9.7137260 | 9.7813456 |
| 10 | 51752.93 | 60482.66 | 116868.10 | 9.7139349 | 9.7816309 |
| 11 | 51777.82 | 60522.40 | 116888.67 | 9.7141437 | 9.7819162 |
| 12 | 51802.70 | 60562.15 | 116909.26 | 9.7143524 | 9.7822013 |
| 13 | 51827.58 | 60601.92 | 116929.86 | 9.7145609 | 9.7824864 |
| 14 | 51852.46 | 60641.70 | 116950.48 | 9.7147693 | 9.7827713 |
| 15 | 51877.33 | 60681.49 | 116971.12 | 9.7149776 | 9.7830562 |
| 16 | 51902.19 | 60721.30 | 116991.78 | 9.7151857 | 9.7833410 |
| 17 | 51927.05 | 60761.12 | 117012.45 | 9.7153937 | 9.7836258 |
| 18 | 51951.91 | 60800.95 | 117033.14 | 9.7156015 | 9.7839104 |
| 19 | 51976.76 | 60840.80 | 117053.85 | 9.7158092 | 9.7841949 |
| 20 | 52001.61 | 60880.67 | 117074.57 | 9.7160168 | 9.7844794 |
| 21 | 52026.46 | 60920.54 | 117095.31 | 9.7162243 | 9.7847638 |
| 22 | 52051.30 | 60960.43 | 117116.07 | 9.7164316 | 9.7850481 |
| 23 | 52076.13 | 61000.34 | 117136.85 | 9.7166387 | 9.7853323 |
| 24 | 52100.95 | 61040.26 | 117157.64 | 9.7168458 | 9.7856164 |
| 25 | 52125.79 | 61080.19 | 117178.45 | 9.7170526 | 9.7859004 |
| 26 | 52150.61 | 61120.14 | 117199.28 | 9.7172594 | 9.7861844 |
| 27 | 52175.43 | 61160.11 | 117220.13 | 9.7174660 | 9.7864682 |
| 28 | 52200.24 | 61200.08 | 117240.99 | 9.7176725 | 9.7867520 |
| 29 | 52225.05 | 61240.07 | 117261.87 | 9.7178789 | 9.7870357 |
| 30 | 52249.86 | 61280.08 | 117282.77 | 9.7180851 | 9.7873193 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 85716.73 | 166427.95 | 194160.40 | 9.9330656 | 10.2212263 |
| 59 | 85701.74 | 166318.34 | 194066.46 | 9.9329897 | 10.2209401 |
| 58 | 85686.75 | 166208.84 | 193972.62 | 9.9329137 | 10.2206541 |
| 57 | 85671.75 | 166099.45 | 193878.89 | 9.9328376 | 10.2203682 |
| 56 | 85656.74 | 165990.16 | 193785.27 | 9.9327616 | 10.2200823 |
| 55 | 85641.73 | 165880.97 | 193691.76 | 9.9326854 | 10.2197966 |
| 54 | 85626.71 | 165771.89 | 193598.35 | 9.9326092 | 10.2195109 |
| 53 | 85611.68 | 165662.92 | 193505.05 | 9.9325330 | 10.2192253 |
| 52 | 85596.64 | 165554.05 | 193411.85 | 9.9324567 | 10.2189398 |
| 51 | 85581.60 | 165445.29 | 193318.76 | 9.9323804 | 10.2186544 |
| 50 | 85566.55 | 165336.63 | 193225.78 | 9.9323040 | 10.2183691 |
| 49 | 85551.49 | 165228.08 | 193132.90 | 9.9322276 | 10.2180838 |
| 48 | 85536.42 | 165119.63 | 193040.13 | 9.9321511 | 10.2177987 |
| 47 | 85521.35 | 165011.28 | 192947.46 | 9.9320746 | 10.2175136 |
| 46 | 85506.27 | 164903.04 | 192854.90 | 9.9319980 | 10.2172287 |
| 45 | 85491.18 | 164794.90 | 192762.44 | 9.9319213 | 10.2169438 |
| 44 | 85476.09 | 164686.86 | 192670.09 | 9.9318447 | 10.2166590 |
| 43 | 85460.99 | 164578.93 | 192577.84 | 9.9317679 | 10.2163742 |
| 42 | 85445.88 | 164471.11 | 192485.70 | 9.9316911 | 10.2160896 |
| 41 | 85430.76 | 164363.38 | 192393.66 | 9.9316143 | 10.2158051 |
| 40 | 85415.64 | 164255.76 | 192301.73 | 9.9315374 | 10.2155206 |
| 39 | 85400.51 | 164148.24 | 192209.90 | 9.9314605 | 10.2152362 |
| 38 | 85385.37 | 164040.82 | 192118.17 | 9.9313835 | 10.2149519 |
| 37 | 85370.23 | 163933.51 | 192026.55 | 9.9313065 | 10.2146677 |
| 36 | 85355.08 | 163826.30 | 191935.03 | 9.9312294 | 10.2143836 |
| 35 | 85339.92 | 163719.19 | 191843.62 | 9.9311522 | 10.2140996 |
| 34 | 85324.75 | 163612.18 | 191752.30 | 9.9310750 | 10.2138156 |
| 33 | 85309.58 | 163505.28 | 191661.09 | 9.9309978 | 10.2135318 |
| 32 | 85294.40 | 163398.47 | 191569.99 | 9.9309205 | 10.2132480 |
| 31 | 85279.21 | 163291.77 | 191478.99 | 9.9308432 | 10.2129643 |
| 30 | 85264.02 | 163185.17 | 191388.09 | 9.9307658 | 10.2126807 |

# 31 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 52249.86 | 61280.08 | 117282.77 | 9.7180851 | 9.7873193 |
| 31 | 52274.66 | 61320.10 | 117303.69 | 9.7182912 | 9.7876028 |
| 32 | 52299.45 | 61360.13 | 117324.62 | 9.7184971 | 9.7878863 |
| 33 | 52324.24 | 61400.18 | 117345.57 | 9.7187030 | 9.7881696 |
| 34 | 52349.03 | 61440.24 | 117366.54 | 9.7189086 | 9.7884529 |
| 35 | 52373.81 | 61480.32 | 117387.52 | 9.7191142 | 9.7887361 |
| 36 | 52398.59 | 61520.41 | 117408.52 | 9.7193196 | 9.7890192 |
| 37 | 52423.36 | 61560.52 | 117429.54 | 9.7195249 | 9.7893023 |
| 38 | 52448.13 | 61600.64 | 117450.58 | 9.7197300 | 9.7895852 |
| 39 | 52472.90 | 61640.77 | 117471.64 | 9.7199350 | 9.7898681 |
| 40 | 52497.66 | 61680.92 | 117492.71 | 9.7201399 | 9.7901508 |
| 41 | 52522.41 | 61721.08 | 117513.80 | 9.7203447 | 9.7904335 |
| 42 | 52547.16 | 61761.26 | 117534.91 | 9.7205493 | 9.7907161 |
| 43 | 52571.91 | 61801.45 | 117556.03 | 9.7207538 | 9.7909987 |
| 44 | 52596.65 | 61841.66 | 117577.17 | 9.7209581 | 9.7912811 |
| 45 | 52621.39 | 61881.88 | 117598.33 | 9.7211623 | 9.7915635 |
| 46 | 52646.12 | 61922.11 | 117619.51 | 9.7213664 | 9.7918458 |
| 47 | 52670.85 | 61962.36 | 117640.70 | 9.7215704 | 9.7921280 |
| 48 | 52695.58 | 62002.63 | 117661.91 | 9.7217742 | 9.7924101 |
| 49 | 52720.30 | 62042.91 | 117683.14 | 9.7219779 | 9.7926921 |
| 50 | 52745.02 | 62083.20 | 117704.39 | 9.7221814 | 9.7929741 |
| 51 | 52769.73 | 62123.51 | 117725.66 | 9.7223848 | 9.7932560 |
| 52 | 52794.44 | 62163.83 | 117746.94 | 9.7225881 | 9.7935378 |
| 53 | 52819.14 | 62204.17 | 117768.24 | 9.7227913 | 9.7938195 |
| 54 | 52843.84 | 62244.52 | 117789.56 | 9.7229943 | 9.7941011 |
| 55 | 52868.53 | 62284.88 | 117810.90 | 9.7231972 | 9.7943827 |
| 56 | 52893.22 | 62325.26 | 117832.25 | 9.7234000 | 9.7946641 |
| 57 | 52917.90 | 62365.66 | 117853.62 | 9.7236026 | 9.7949455 |
| 58 | 52942.58 | 62406.07 | 117875.01 | 9.7238051 | 9.7952268 |
| 59 | 52967.26 | 62446.50 | 117896.42 | 9.7240075 | 9.7955081 |
| 60 | 52991.93 | 62486.94 | 117917.84 | 9.7242097 | 9.7957892 |

# 58 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 85264.02 | 163185.17 | 191388.09 | 9.9307658 | 10.2126807 |
| 29 | 85248.81 | 163078.67 | 191297.29 | 9.9306883 | 10.2123972 |
| 28 | 85233.60 | 162972.27 | 191206.59 | 9.9306109 | 10.2121137 |
| 27 | 85218.38 | 162865.97 | 191116.00 | 9.9305333 | 10.2118304 |
| 26 | 85203.16 | 162759.77 | 191025.51 | 9.9304557 | 10.2115471 |
| 25 | 85187.93 | 162653.68 | 190935.12 | 9.9303781 | 10.2112639 |
| 24 | 85172.69 | 162547.68 | 190844.83 | 9.9303004 | 10.2109808 |
| 23 | 85157.44 | 162441.78 | 190754.64 | 9.9302226 | 10.2106977 |
| 22 | 85142.19 | 162335.99 | 190664.56 | 9.9301448 | 10.2104148 |
| 21 | 85126.93 | 162230.29 | 190574.57 | 9.9300670 | 10.2101319 |
| 20 | 85111.66 | 162124.69 | 190484.69 | 9.9299891 | 10.2098492 |
| 19 | 85096.39 | 162019.20 | 190394.91 | 9.9299112 | 10.2095665 |
| 18 | 85081.11 | 161913.80 | 190305.22 | 9.9298332 | 10.2092839 |
| 17 | 85065.82 | 161808.50 | 190215.64 | 9.9297551 | 10.2090013 |
| 16 | 85050.52 | 161703.30 | 190126.16 | 9.9296770 | 10.2087189 |
| 15 | 85035.22 | 161598.20 | 190036.78 | 9.9295989 | 10.2084365 |
| 14 | 85019.91 | 161493.20 | 189947.50 | 9.9295207 | 10.2081542 |
| 13 | 85004.59 | 161388.29 | 189858.32 | 9.9294424 | 10.2078720 |
| 12 | 84989.27 | 161283.49 | 189769.24 | 9.9293641 | 10.2075899 |
| 11 | 84973.94 | 161178.78 | 189680.26 | 9.9292857 | 10.2073079 |
| 10 | 84958.60 | 161074.17 | 189591.38 | 9.9292073 | 10.2070259 |
| 9 | 84943.25 | 160969.66 | 189502.59 | 9.9291289 | 10.2067440 |
| 8 | 84927.90 | 160865.25 | 189413.91 | 9.9290504 | 10.2064622 |
| 7 | 84912.54 | 160760.94 | 189325.32 | 9.9289718 | 10.2061805 |
| 6 | 84897.17 | 160656.72 | 189236.84 | 9.9288932 | 10.2058989 |
| 5 | 84881.79 | 160552.60 | 189148.45 | 9.9288145 | 10.2056173 |
| 4 | 84866.41 | 160448.58 | 189060.16 | 9.9287358 | 10.2053359 |
| 3 | 84851.02 | 160344.65 | 188971.97 | 9.9286571 | 10.2050545 |
| 2 | 84835.62 | 160240.82 | 188883.88 | 9.9285783 | 10.2047732 |
| 1 | 84820.22 | 160137.09 | 188795.89 | 9.9284994 | 10.2044919 |
| 0 | 84804.81 | 160033.45 | 188707.99 | 9.9284205 | 10.2042108 |

# 32 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 52991.93 | 62486.94 | 117917.84 | 9.7242097 | 9.7957892 |
| 1 | 53016.59 | 62527.39 | 117939.28 | 9.7244118 | 9.7960703 |
| 2 | 53041.25 | 62567.86 | 117960.74 | 9.7246138 | 9.7963513 |
| 3 | 53065.91 | 62608.34 | 117982.22 | 9.7248156 | 9.7966322 |
| 4 | 53090.56 | 62648.84 | 118003.72 | 9.7250174 | 9.7969130 |
| 5 | 53115.21 | 62689.35 | 118025.23 | 9.7252189 | 9.7971938 |
| 6 | 53139.86 | 62729.88 | 118046.76 | 9.7254204 | 9.7974745 |
| 7 | 53164.50 | 62770.42 | 118068.31 | 9.7256217 | 9.7977551 |
| 8 | 53189.13 | 62810.98 | 118089.88 | 9.7258229 | 9.7980356 |
| 9 | 53213.76 | 62851.56 | 118111.47 | 9.7260240 | 9.7983160 |
| 10 | 53238.39 | 62892.15 | 118133.07 | 9.7262249 | 9.7985964 |
| 11 | 53263.01 | 62932.75 | 118154.69 | 9.7264257 | 9.7988767 |
| 12 | 53287.63 | 62973.36 | 118176.33 | 9.7266264 | 9.7991569 |
| 13 | 53312.24 | 63013.99 | 118197.99 | 9.7268269 | 9.7994370 |
| 14 | 53336.85 | 63054.64 | 118219.66 | 9.7270273 | 9.7997170 |
| 15 | 53361.45 | 63095.30 | 118241.35 | 9.7272276 | 9.7999970 |
| 16 | 53386.05 | 63135.98 | 118263.06 | 9.7274278 | 9.8002769 |
| 17 | 53410.64 | 63176.67 | 118284.79 | 9.7276278 | 9.8005567 |
| 18 | 53435.23 | 63217.38 | 118306.54 | 9.7278277 | 9.8008365 |
| 19 | 53459.82 | 63258.10 | 118328.30 | 9.7280275 | 9.8011161 |
| 20 | 53484.40 | 63298.83 | 118350.08 | 9.7282271 | 9.8013957 |
| 21 | 53508.98 | 63339.58 | 118371.88 | 9.7284267 | 9.8016752 |
| 22 | 53533.55 | 63380.35 | 118393.70 | 9.7286260 | 9.8019546 |
| 23 | 53558.12 | 63421.13 | 118415.54 | 9.7288253 | 9.8022340 |
| 24 | 53582.68 | 63461.93 | 118437.40 | 9.7290244 | 9.8025133 |
| 25 | 53607.24 | 63502.74 | 118459.27 | 9.7292234 | 9.8027925 |
| 26 | 53631.79 | 63543.57 | 118481.16 | 9.7294223 | 9.8030716 |
| 27 | 53656.34 | 63584.41 | 118503.07 | 9.7296211 | 9.8033506 |
| 28 | 53680.88 | 63625.27 | 118525.00 | 9.7298197 | 9.8036296 |
| 29 | 53705.42 | 63666.14 | 118546.94 | 9.7300182 | 9.8039085 |
| 30 | 53729.96 | 63707.03 | 118568.91 | 9.7302165 | 9.8041873 |

# 57 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 84804.81 | 160033.45 | 188707.99 | 9.9284205 | 10.2042108 |
| 59 | 84789.39 | 159929.91 | 188620.19 | 9.9283415 | 10.2039297 |
| 58 | 84773.96 | 159826.47 | 188532.49 | 9.9282625 | 10.2036487 |
| 57 | 84758.53 | 159723.12 | 188444.89 | 9.9281834 | 10.2033678 |
| 56 | 84743.09 | 159619.87 | 188357.38 | 9.9281043 | 10.2030870 |
| 55 | 84727.64 | 159516.72 | 188269.97 | 9.9280251 | 10.2028062 |
| 54 | 84712.19 | 159413.66 | 188182.66 | 9.9279459 | 10.2025255 |
| 53 | 84696.73 | 159310.70 | 188095.45 | 9.9278666 | 10.2022449 |
| 52 | 84681.26 | 159207.83 | 188008.33 | 9.9277873 | 10.2019644 |
| 51 | 84665.78 | 159105.05 | 187921.31 | 9.9277079 | 10.2016840 |
| 50 | 84650.30 | 159002.38 | 187834.38 | 9.9276285 | 10.2014036 |
| 49 | 84634.81 | 158899.79 | 187747.55 | 9.9275490 | 10.2011233 |
| 48 | 84619.31 | 158797.30 | 187660.82 | 9.9274695 | 10.2008431 |
| 47 | 84603.81 | 158694.91 | 187574.18 | 9.9273899 | 10.2005630 |
| 46 | 84588.30 | 158592.61 | 187487.64 | 9.9273103 | 10.2002830 |
| 45 | 84572.78 | 158490.41 | 187401.20 | 9.9272306 | 10.2000030 |
| 44 | 84557.25 | 158388.30 | 187314.85 | 9.9271509 | 10.1997231 |
| 43 | 84541.72 | 158286.28 | 187228.59 | 9.9270711 | 10.1994433 |
| 42 | 84526.18 | 158184.36 | 187142.43 | 9.9269913 | 10.1991635 |
| 41 | 84510.63 | 158082.53 | 187056.37 | 9.9269114 | 10.1988839 |
| 40 | 84495.08 | 157980.79 | 186970.40 | 9.9268314 | 10.1986043 |
| 39 | 84479.52 | 157879.15 | 186884.53 | 9.9267514 | 10.1983248 |
| 38 | 84463.95 | 157777.60 | 186798.75 | 9.9266714 | 10.1980454 |
| 37 | 84448.37 | 157676.15 | 186713.06 | 9.9265913 | 10.1977660 |
| 36 | 84432.79 | 157574.79 | 186627.47 | 9.9265112 | 10.1974867 |
| 35 | 84417.20 | 157473.52 | 186541.97 | 9.9264310 | 10.1972075 |
| 34 | 84401.60 | 157372.34 | 186456.57 | 9.9263507 | 10.1969284 |
| 33 | 84386.00 | 157271.26 | 186371.26 | 9.9262704 | 10.1966494 |
| 32 | 84370.39 | 157170.26 | 186286.05 | 9.9261901 | 10.1963704 |
| 31 | 84354.77 | 157069.36 | 186200.93 | 9.9261096 | 10.1960915 |
| 30 | 84339.14 | 156968.56 | 186115.90 | 9.9260292 | 10.1958127 |

# 32 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 53729.96 | 63707.03 | 118568.91 | 9.7302165 | 9.8041873 |
| 31 | 53754.49 | 63747.93 | 118590.89 | 9.7304148 | 9.8044661 |
| 32 | 53779.02 | 63788.85 | 118612.89 | 9.7306129 | 9.8047447 |
| 33 | 53803.54 | 63829.78 | 118634.91 | 9.7308109 | 9.8050233 |
| 34 | 53828.06 | 63870.73 | 118656.95 | 9.7310087 | 9.8053019 |
| 35 | 53852.57 | 63911.69 | 118679.00 | 9.7312064 | 9.8055803 |
| 36 | 53877.08 | 63952.67 | 118701.07 | 9.7314040 | 9.8058587 |
| 37 | 53901.58 | 63993.66 | 118723.16 | 9.7316015 | 9.8061370 |
| 38 | 53926.08 | 64034.67 | 118745.27 | 9.7317989 | 9.8064152 |
| 39 | 53950.58 | 64075.69 | 118767.40 | 9.7319961 | 9.8066933 |
| 40 | 53975.07 | 64116.73 | 118789.55 | 9.7321932 | 9.8069714 |
| 41 | 53999.55 | 64157.79 | 118811.71 | 9.7323902 | 9.8072494 |
| 42 | 54024.03 | 64198.86 | 118833.89 | 9.7325870 | 9.8075273 |
| 43 | 54048.51 | 64239.95 | 118856.09 | 9.7327837 | 9.8078052 |
| 44 | 54072.98 | 64281.05 | 118878.31 | 9.7329803 | 9.8080829 |
| 45 | 54097.45 | 64322.16 | 118900.55 | 9.7331768 | 9.8083606 |
| 46 | 54121.91 | 64363.29 | 118922.81 | 9.7333731 | 9.8086383 |
| 47 | 54146.37 | 64404.44 | 118945.08 | 9.7335693 | 9.8089158 |
| 48 | 54170.82 | 64445.60 | 118967.37 | 9.7337654 | 9.8091933 |
| 49 | 54195.27 | 64486.78 | 118989.68 | 9.7339614 | 9.8094707 |
| 50 | 54219.71 | 64527.97 | 119012.01 | 9.7341572 | 9.8097480 |
| 51 | 54244.15 | 64569.18 | 119034.36 | 9.7343529 | 9.8100253 |
| 52 | 54268.59 | 64610.41 | 119056.73 | 9.7345485 | 9.8103025 |
| 53 | 54293.02 | 64651.65 | 119079.12 | 9.7347440 | 9.8105796 |
| 54 | 54317.44 | 64692.90 | 119101.52 | 9.7349393 | 9.8108566 |
| 55 | 54341.86 | 64734.17 | 119123.94 | 9.7351345 | 9.8111336 |
| 56 | 54366.28 | 64775.46 | 119146.38 | 9.7353296 | 9.8114105 |
| 57 | 54390.69 | 64816.76 | 119168.84 | 9.7355246 | 9.8116873 |
| 58 | 54415.10 | 64858.08 | 119191.32 | 9.7357195 | 9.8119641 |
| 59 | 54439.50 | 64899.41 | 119213.82 | 9.7359142 | 9.8122408 |
| 60 | 54463.90 | 64940.76 | 119236.33 | 9.7361088 | 9.8125174 |

# 57 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 84339.14 | 156968.56 | 186115.90 | 9.9260292 | 10.1958127 |
| 29 | 84323.51 | 156867.84 | 186030.96 | 9.9259487 | 10.1955339 |
| 28 | 84307.87 | 156767.22 | 185946.12 | 9.9258681 | 10.1952553 |
| 27 | 84292.22 | 156666.69 | 185861.38 | 9.9257875 | 10.1949767 |
| 26 | 84276.57 | 156566.25 | 185776.72 | 9.9257069 | 10.1946981 |
| 25 | 84260.91 | 156465.90 | 185692.16 | 9.9256261 | 10.1944197 |
| 24 | 84245.24 | 156365.64 | 185607.69 | 9.9255454 | 10.1941413 |
| 23 | 84229.56 | 156265.48 | 185523.31 | 9.9254646 | 10.1938630 |
| 22 | 84213.88 | 156165.40 | 185439.03 | 9.9253837 | 10.1935848 |
| 21 | 84198.19 | 156065.42 | 185354.83 | 9.9253028 | 10.1933067 |
| 20 | 84182.49 | 155965.52 | 185270.73 | 9.9252218 | 10.1930286 |
| 19 | 84166.79 | 155865.72 | 185186.72 | 9.9251408 | 10.1927506 |
| 18 | 84151.08 | 155766.01 | 185102.81 | 9.9250597 | 10.1924727 |
| 17 | 84135.36 | 155666.39 | 185018.98 | 9.9249786 | 10.1921948 |
| 16 | 84119.63 | 155566.85 | 184935.25 | 9.9248974 | 10.1919171 |
| 15 | 84103.90 | 155467.41 | 184851.61 | 9.9248161 | 10.1916394 |
| 14 | 84088.16 | 155368.06 | 184768.05 | 9.9247349 | 10.1913617 |
| 13 | 84072.41 | 155268.80 | 184684.59 | 9.9246535 | 10.1910842 |
| 12 | 84056.66 | 155169.63 | 184601.23 | 9.9245721 | 10.1908067 |
| 11 | 84040.90 | 155070.54 | 184517.95 | 9.9244907 | 10.1905293 |
| 10 | 84025.13 | 154971.55 | 184434.76 | 9.9244092 | 10.1902520 |
| 9 | 84009.35 | 154872.64 | 184351.66 | 9.9243277 | 10.1899747 |
| 8 | 83993.57 | 154773.83 | 184268.66 | 9.9242461 | 10.1896975 |
| 7 | 83977.78 | 154675.10 | 184185.74 | 9.9241644 | 10.1894204 |
| 6 | 83961.98 | 154576.46 | 184102.92 | 9.9240827 | 10.1891434 |
| 5 | 83946.18 | 154477.92 | 184020.18 | 9.9240010 | 10.1888664 |
| 4 | 83930.37 | 154379.46 | 183937.53 | 9.9239191 | 10.1885895 |
| 3 | 83914.55 | 154281.08 | 183854.98 | 9.9238373 | 10.1883127 |
| 2 | 83898.73 | 154182.80 | 183772.51 | 9.9237554 | 10.1880359 |
| 1 | 83882.90 | 154084.60 | 183690.13 | 9.9236734 | 10.1877592 |
| 0 | 83867.06 | 153986.50 | 183607.84 | 9.9235914 | 10.1874826 |

## 33 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 54463.90 | 64940.76 | 119236.33 | 9.7361088 | 9.8125174 |
| 1 | 54488.30 | 64982.12 | 119258.86 | 9.7363032 | 9.8127939 |
| 2 | 54512.69 | 65023.50 | 119281.41 | 9.7364976 | 9.8130704 |
| 3 | 54537.07 | 65064.90 | 119303.98 | 9.7366918 | 9.8133468 |
| 4 | 54561.45 | 65106.31 | 119326.57 | 9.7368859 | 9.8136231 |
| 5 | 54585.83 | 65147.74 | 119349.18 | 9.7370799 | 9.8138993 |
| 6 | 54610.20 | 65189.18 | 119371.81 | 9.7372737 | 9.8141755 |
| 7 | 54634.56 | 65230.64 | 119394.46 | 9.7374675 | 9.8144516 |
| 8 | 54658.92 | 65272.11 | 119417.12 | 9.7376611 | 9.8147277 |
| 9 | 54683.28 | 65313.60 | 119439.80 | 9.7378545 | 9.8150036 |
| 10 | 54707.63 | 65355.11 | 119462.50 | 9.7380479 | 9.8152795 |
| 11 | 54731.98 | 65396.63 | 119485.22 | 9.7382412 | 9.8155554 |
| 12 | 54756.32 | 65438.17 | 119507.96 | 9.7384343 | 9.8158311 |
| 13 | 54780.66 | 65479.72 | 119530.72 | 9.7386273 | 9.8161068 |
| 14 | 54804.99 | 65521.29 | 119553.50 | 9.7388201 | 9.8163824 |
| 15 | 54829.32 | 65562.87 | 119576.30 | 9.7390129 | 9.8166580 |
| 16 | 54853.65 | 65604.47 | 119599.11 | 9.7392055 | 9.8169335 |
| 17 | 54877.97 | 65646.09 | 119621.94 | 9.7393980 | 9.8172089 |
| 18 | 54902.28 | 65687.72 | 119644.79 | 9.7395904 | 9.8174842 |
| 19 | 54926.59 | 65729.37 | 119667.66 | 9.7397827 | 9.8177595 |
| 20 | 54950.90 | 65771.03 | 119690.55 | 9.7399748 | 9.8180347 |
| 21 | 54975.20 | 65812.71 | 119713.46 | 9.7401668 | 9.8183098 |
| 22 | 54999.50 | 65854.41 | 119736.39 | 9.7403587 | 9.8185849 |
| 23 | 55023.79 | 65896.12 | 119759.34 | 9.7405505 | 9.8188599 |
| 24 | 55048.08 | 65937.85 | 119782.31 | 9.7407421 | 9.8191348 |
| 25 | 55072.36 | 65979.59 | 119805.29 | 9.7409337 | 9.8194096 |
| 26 | 55096.64 | 66021.35 | 119828.29 | 9.7411251 | 9.8196844 |
| 27 | 55120.91 | 66063.13 | 119851.31 | 9.7413164 | 9.8199592 |
| 28 | 55145.18 | 66104.92 | 119874.35 | 9.7415075 | 9.8202338 |
| 29 | 55169.44 | 66146.73 | 119897.41 | 9.7416986 | 9.8205084 |
| 30 | 55193.70 | 66188.56 | 119920.49 | 9.7418895 | 9.8207829 |

## 56 Grad.

| Minut. | Sinus | Tang. | Secans | Log. Sin. | Log. Tan. |
|---|---|---|---|---|---|
| 60 | 83867.06 | 153986.50 | 183607.84 | 9.9235914 | 10.1874826 |
| 59 | 83851.21 | 153888.48 | 183525.64 | 9.9235093 | 10.1872061 |
| 58 | 83835.36 | 153790.55 | 183443.53 | 9.9234272 | 10.1869296 |
| 57 | 83819.50 | 153692.70 | 183361.51 | 9.9233450 | 10.1866532 |
| 56 | 83803.63 | 153594.94 | 183279.58 | 9.9232628 | 10.1863769 |
| 55 | 83787.75 | 153497.27 | 183197.74 | 9.9231805 | 10.1861007 |
| 54 | 83771.87 | 153399.69 | 183115.99 | 9.9230982 | 10.1858245 |
| 53 | 83755.98 | 153302.20 | 183034.32 | 9.9230158 | 10.1855484 |
| 52 | 83740.08 | 153204.79 | 182952.74 | 9.9229334 | 10.1852723 |
| 51 | 83724.18 | 153107.47 | 182871.25 | 9.9228509 | 10.1849964 |
| 50 | 83708.27 | 153010.23 | 182789.85 | 9.9227684 | 10.1847205 |
| 49 | 83692.35 | 152913.08 | 182708.54 | 9.9226858 | 10.1844446 |
| 48 | 83676.43 | 152816.02 | 182627.31 | 9.9226032 | 10.1841689 |
| 47 | 83660.50 | 152719.04 | 182546.17 | 9.9225205 | 10.1838932 |
| 46 | 83644.56 | 152622.15 | 182465.12 | 9.9224377 | 10.1836176 |
| 45 | 83628.61 | 152525.35 | 182384.16 | 9.9223549 | 10.1833420 |
| 44 | 83612.66 | 152428.63 | 182303.28 | 9.9222721 | 10.1830665 |
| 43 | 83596.70 | 152332.00 | 182222.49 | 9.9221891 | 10.1827911 |
| 42 | 83580.73 | 152235.45 | 182141.79 | 9.9221062 | 10.1825158 |
| 41 | 83564.76 | 152138.99 | 182061.18 | 9.9220232 | 10.1822405 |
| 40 | 83548.78 | 152042.61 | 181980.65 | 9.9219401 | 10.1819653 |
| 39 | 83532.79 | 151946.32 | 181900.21 | 9.9218570 | 10.1816902 |
| 38 | 83516.80 | 151850.12 | 181819.85 | 9.9217738 | 10.1814151 |
| 37 | 83500.80 | 151754.00 | 181739.58 | 9.9216906 | 10.1811401 |
| 36 | 83484.79 | 151657.96 | 181659.40 | 9.9216073 | 10.1808652 |
| 35 | 83468.77 | 151562.01 | 181579.30 | 9.9215240 | 10.1805904 |
| 34 | 83452.75 | 151466.14 | 181499.29 | 9.9214406 | 10.1803156 |
| 33 | 83436.72 | 151370.36 | 181419.37 | 9.9213572 | 10.1800408 |
| 32 | 83420.68 | 151274.66 | 181339.53 | 9.9212737 | 10.1797662 |
| 31 | 83404.63 | 151179.05 | 181259.77 | 9.9211902 | 10.1794916 |
| 30 | 83388.58 | 151083.52 | 181180.10 | 9.9211066 | 10.1792171 |

# 33 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 55193.70 | 66188.56 | 119920.49 | 9.7418895 | 9.8207829 |
| 31 | 55217.95 | 66230.40 | 119943.59 | 9.7420803 | 9.8210574 |
| 32 | 55242.20 | 66272.26 | 119966.71 | 9.7422710 | 9.8213317 |
| 33 | 55266.45 | 66314.13 | 119989.85 | 9.7424616 | 9.8216060 |
| 34 | 55290.69 | 66356.02 | 120013.01 | 9.7426520 | 9.8218803 |
| 35 | 55314.92 | 66397.92 | 120036.19 | 9.7428423 | 9.8221545 |
| 36 | 55339.15 | 66439.84 | 120059.38 | 9.7430325 | 9.8224286 |
| 37 | 55363.38 | 66481.78 | 120082.59 | 9.7432226 | 9.8227026 |
| 38 | 55387.60 | 66523.73 | 120105.82 | 9.7434126 | 9.8229766 |
| 39 | 55411.82 | 66565.70 | 120129.07 | 9.7436024 | 9.8232505 |
| 40 | 55436.03 | 66607.69 | 120152.34 | 9.7437921 | 9.8235244 |
| 41 | 55460.24 | 66649.69 | 120175.63 | 9.7439817 | 9.8237981 |
| 42 | 55484.44 | 66691.71 | 120198.94 | 9.7441712 | 9.8240719 |
| 43 | 55508.64 | 66733.75 | 120222.27 | 9.7443606 | 9.8243455 |
| 44 | 55532.83 | 66775.80 | 120245.62 | 9.7445498 | 9.8246191 |
| 45 | 55557.02 | 66817.87 | 120268.99 | 9.7447390 | 9.8248926 |
| 46 | 55581.21 | 66859.95 | 120292.37 | 9.7449280 | 9.8251660 |
| 47 | 55605.39 | 66902.05 | 120315.77 | 9.7451169 | 9.8254394 |
| 48 | 55629.56 | 66944.17 | 120339.19 | 9.7453056 | 9.8257127 |
| 49 | 55653.73 | 66986.30 | 120362.64 | 9.7454943 | 9.8259860 |
| 50 | 55677.90 | 67028.45 | 120386.10 | 9.7456828 | 9.8262592 |
| 51 | 55702.06 | 67070.62 | 120409.58 | 9.7458712 | 9.8265323 |
| 52 | 55726.21 | 67112.80 | 120433.08 | 9.7460595 | 9.8268053 |
| 53 | 55750.36 | 67155.00 | 120456.60 | 9.7462477 | 9.8270783 |
| 54 | 55774.51 | 67197.21 | 120480.14 | 9.7464358 | 9.8273513 |
| 55 | 55798.65 | 67239.44 | 120503.70 | 9.7466237 | 9.8276241 |
| 56 | 55822.79 | 67281.69 | 120527.28 | 9.7468115 | 9.8278969 |
| 57 | 55846.92 | 67323.96 | 120550.88 | 9.7469992 | 9.8281696 |
| 58 | 55871.05 | 67366.24 | 120574.50 | 9.7471868 | 9.8284423 |
| 59 | 55895.17 | 67408.54 | 120598.14 | 9.7473743 | 9.8287149 |
| 60 | 55919.29 | 67450.85 | 120621.80 | 9.7475617 | 9.8289874 |

# 56 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan.* |
|---|---|---|---|---|---|
| 30 | 83388.58 | 151083.52 | 181180.10 | 9.9211066 | 10.1792171 |
| 29 | 83372.52 | 150988.07 | 181100.52 | 9.9210229 | 10.1789426 |
| 28 | 83356.45 | 150892.71 | 181021.02 | 9.9209393 | 10.1786683 |
| 27 | 83340.38 | 150797.43 | 180941.61 | 9.9208555 | 10.1783940 |
| 26 | 83324.30 | 150702.24 | 180862.28 | 9.9207717 | 10.1781197 |
| 25 | 83308.21 | 150607.13 | 180783.04 | 9.9206878 | 10.1778455 |
| 24 | 83292.12 | 150512.10 | 180703.88 | 9.9206039 | 10.1775714 |
| 23 | 83276.02 | 150417.16 | 180624.81 | 9.9205200 | 10.1772974 |
| 22 | 83259.91 | 150322.30 | 180545.82 | 9.9204360 | 10.1770234 |
| 21 | 83243.80 | 150227.52 | 180466.91 | 9.9203519 | 10.1767495 |
| 20 | 83227.68 | 150132.82 | 180388.09 | 9.9202678 | 10.1764756 |
| 19 | 83211.55 | 150038.20 | 180309.35 | 9.9201836 | 10.1762019 |
| 18 | 83195.41 | 149943.67 | 180230.70 | 9.9200994 | 10.1759281 |
| 17 | 83179.27 | 149849.22 | 180152.13 | 9.9200151 | 10.1756545 |
| 16 | 83163.12 | 149754.86 | 180073.65 | 9.9199308 | 10.1753809 |
| 15 | 83146.96 | 149660.58 | 179995.25 | 9.9198464 | 10.1751074 |
| 14 | 83130.79 | 149566.38 | 179916.93 | 9.9197619 | 10.1748340 |
| 13 | 83114.62 | 149472.26 | 179838.69 | 9.9196775 | 10.1745606 |
| 12 | 83098.44 | 149378.22 | 179760.54 | 9.9195929 | 10.1742873 |
| 11 | 83082.26 | 149284.26 | 179682.47 | 9.9195083 | 10.1740140 |
| 10 | 83066.07 | 149190.38 | 179604.48 | 9.9[illegible]4237 | 10.1737408 |
| 9 | 83049.87 | 149096.59 | 179526.58 | 9.9193390 | 10.1734677 |
| 8 | 83033.66 | 149002.88 | 179448.76 | 9.9192542 | 10.1731947 |
| 7 | 83017.45 | 148909.25 | 179371.02 | 9.9191694 | 10.1729217 |
| 6 | 83001.23 | 148815.70 | 179293.37 | 9.9190845 | 10.1726487 |
| 5 | 82985.00 | 148722.23 | 179215.80 | 9.9189996 | 10.1723759 |
| 4 | 82968.76 | 148628.84 | 179138.31 | 9.9189146 | 10.1721031 |
| 3 | 82952.52 | 148535.53 | 179060.90 | 9.9188296 | 10.1718304 |
| 2 | 82936.27 | 148442.30 | 178983.58 | 9.9187445 | 10.1715577 |
| 1 | 82920.02 | 148349.16 | 178906.33 | 9.9186594 | 10.1712851 |
| 0 | 82903.76 | 148256.10 | 178829.16 | 9.9185742 | 10.1710126 |

# 34 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 55919.29 | 67450.85 | 120621.80 | 9.7475617 | 9.8289874 |
| 1 | 55943.40 | 67493.18 | 120645.48 | 9.7477489 | 9.8292599 |
| 2 | 55967.51 | 67535.53 | 120669.18 | 9.7479360 | 9.8295323 |
| 3 | 55991.61 | 67577.90 | 120692.89 | 9.7481230 | 9.8298047 |
| 4 | 56015.71 | 67620.28 | 120716.62 | 9.7483099 | 9.8300769 |
| 5 | 56039.81 | 67662.68 | 120740.37 | 9.7484967 | 9.8303492 |
| 6 | 56063.70 | 67705.09 | 120764.14 | 9.7486833 | 9.8306213 |
| 7 | 56087.98 | 67747.52 | 120787.93 | 9.7488698 | 9.8308934 |
| 8 | 56112.06 | 67789.97 | 120811.75 | 9.7490562 | 9.8311654 |
| 9 | 56136.14 | 67832.44 | 120835.59 | 9.7492425 | 9.8314374 |
| 10 | 56160.21 | 67874.92 | 120859.44 | 9.7494287 | 9.8317093 |
| 11 | 56184.28 | 67917.42 | 120883.31 | 9.7496148 | 9.8319811 |
| 12 | 56208.34 | 67959.93 | 120907.20 | 9.7498007 | 9.8322529 |
| 13 | 56232.39 | 68002.46 | 120931.12 | 9.7499866 | 9.8325246 |
| 14 | 56256.44 | 68045.01 | 120955.05 | 9.7501723 | 9.8327963 |
| 15 | 56280.49 | 68087.58 | 120979.00 | 9.7503579 | 9.8330679 |
| 16 | 56304.53 | 68130.16 | 121002.97 | 9.7505434 | 9.8333394 |
| 17 | 56328.57 | 68172.76 | 121026.98 | 9.7507287 | 9.8336109 |
| 18 | 56352.60 | 68215.38 | 121050.97 | 9.7509140 | 9.8338823 |
| 19 | 56376.63 | 68258.01 | 121075.00 | 9.7510991 | 9.8341536 |
| 20 | 56400.65 | 68300.66 | 121099.05 | 9.7512842 | 9.8344249 |
| 21 | 56424.67 | 68343.33 | 121123.12 | 9.7514691 | 9.8346961 |
| 22 | 56448.69 | 68386.01 | 121147.21 | 9.7516538 | 9.8349673 |
| 23 | 56472.70 | 68428.71 | 121171.32 | 9.7518385 | 9.8352384 |
| 24 | 56496.70 | 68471.43 | 121195.45 | 9.7520231 | 9.8355094 |
| 25 | 56520.70 | 68514.17 | 121219.60 | 9.7522075 | 9.8357804 |
| 26 | 56544.69 | 68556.92 | 121243.77 | 9.7523919 | 9.8360513 |
| 27 | 56568.68 | 68599.69 | 121267.96 | 9.7525761 | 9.8363221 |
| 28 | 56592.67 | 68642.47 | 121292.17 | 9.7527602 | 9.8365929 |
| 29 | 56616.65 | 68685.27 | 121316.40 | 9.7529442 | 9.8368636 |
| 30 | 56640.62 | 68728.10 | 121340.64 | 9.7531280 | 9.8371343 |

# 55 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 82903.76 | 148256.10 | 178829.16 | 9.9185742 | 10.1710126 |
| 59 | 82887.49 | 148163.11 | 178752.08 | 9.9184890 | 10.1707401 |
| 58 | 82871.21 | 148070.21 | 178675.08 | 9.9184037 | 10.1704677 |
| 57 | 82854.93 | 147977.38 | 178598.17 | 9.9183183 | 10.1701953 |
| 56 | 82838.64 | 147884.63 | 178521.33 | 9.9182329 | 10.1699231 |
| 55 | 82822.34 | 147791.97 | 178444.57 | 9.9181475 | 10.1696508 |
| 54 | 82806.03 | 147699.38 | 178367.90 | 9.9180620 | 10.1693787 |
| 53 | 82789.72 | 147606.88 | 178291.31 | 9.9179764 | 10.1691066 |
| 52 | 82773.40 | 147514.45 | 178214.79 | 9.9178908 | 10.1688346 |
| 51 | 82757.07 | 147422.10 | 178138.36 | 9.9178051 | 10.1685626 |
| 50 | 82740.74 | 147329.83 | 178062.01 | 9.9177194 | 10.1682907 |
| 49 | 82724.40 | 147237.64 | 177985.74 | 9.9176336 | 10.1680189 |
| 48 | 82708.05 | 147145.53 | 177909.55 | 9.9175478 | 10.1677471 |
| 47 | 82691.70 | 147053.50 | 177833.43 | 9.9174619 | 10.1674754 |
| 46 | 82675.34 | 146961.55 | 177757.40 | 9.9173760 | 10.1672037 |
| 45 | 82658.97 | 146869.67 | 177681.45 | 9.9172900 | 10.1669321 |
| 44 | 82642.60 | 146777.87 | 177605.58 | 9.9172040 | 10.1666606 |
| 43 | 82626.22 | 146686.16 | 177529.79 | 9.9171179 | 10.1663891 |
| 42 | 82609.83 | 146594.52 | 177454.08 | 9.9170317 | 10.1661177 |
| 41 | 82593.43 | 146502.96 | 177378.45 | 9.9169455 | 10.1658464 |
| 40 | 82577.03 | 146411.47 | 177302.90 | 9.9168593 | 10.1655751 |
| 39 | 82560.62 | 146320.07 | 177227.43 | 9.9167730 | 10.1653039 |
| 38 | 82544.20 | 146228.74 | 177152.04 | 9.9166866 | 10.1650327 |
| 37 | 82527.78 | 146137.49 | 177076.73 | 9.9166002 | 10.1647616 |
| 36 | 82511.35 | 146046.32 | 177001.49 | 9.9165137 | 10.1644906 |
| 35 | 82494.91 | 145955.22 | 176926.33 | 9.9164272 | 10.1642196 |
| 34 | 82478.47 | 145864.20 | 176851.25 | 9.9163406 | 10.1639487 |
| 33 | 82462.02 | 145773.26 | 176776.25 | 9.9162539 | 10.1636779 |
| 32 | 82445.56 | 145682.40 | 176701.33 | 9.9161673 | 10.1634071 |
| 31 | 82429.09 | 145591.61 | 176626.49 | 9.9160805 | 10.1631364 |
| 30 | 82412.62 | 145500.90 | 176551.73 | 9.9159937 | 10.1628657 |

# 34 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 56640.62 | 68728.10 | 121340.64 | 9.7531280 | 9.8371343 |
| 31 | 56664.59 | 68770.94 | 121364.91 | 9.7533118 | 9.8374049 |
| 32 | 56688.56 | 68813.79 | 121389.20 | 9.7534954 | 9.8376755 |
| 53 | 56712.52 | 68856.66 | 121413.51 | 9.7536790 | 9.8379460 |
| 34 | 56736.48 | 68899.55 | 121437.83 | 9.7538624 | 9.8382164 |
| 35 | 56760.43 | 68942.46 | 121462.18 | 9.7540457 | 9.8384867 |
| 36 | 56784.37 | 68985.38 | 121486.55 | 9.7542288 | 9.8387571 |
| 37 | 56808.31 | 69028.32 | 121510.94 | 9.7544119 | 9.8390273 |
| 38 | 56832.25 | 69071.28 | 121535.35 | 9.7545949 | 9.8392975 |
| 39 | 56856.18 | 69114.25 | 121559.78 | 9.7547777 | 9.8395676 |
| 40 | 56880.11 | 69157.24 | 121584.23 | 9.7549604 | 9.8398377 |
| 41 | 56904.03 | 69200.25 | 121608.70 | 9.7551431 | 9.8401077 |
| 42 | 56927.95 | 69243.28 | 121633.19 | 9.7553256 | 9.8403776 |
| 43 | 56951.86 | 69286.33 | 121657.70 | 9.7555080 | 9.8406475 |
| 44 | 56975.77 | 69329.39 | 121682.23 | 9.7556902 | 9.8409174 |
| 45 | 56999.68 | 69372.47 | 121706.78 | 9.7558724 | 9.8411871 |
| 46 | 57023.58 | 69415.57 | 121731.35 | 9.7560544 | 9.8414569 |
| 47 | 57047.47 | 69458.68 | 121755.94 | 9.7562364 | 9.8417265 |
| 48 | 57071.36 | 69501.81 | 121780.55 | 9.7564182 | 9.8419961 |
| 49 | 57095.24 | 69544.96 | 121805.18 | 9.7565999 | 9.8422657 |
| 50 | 57119.12 | 69588.13 | 121829.83 | 9.7567815 | 9.8425351 |
| 51 | 57142.99 | 69631.31 | 121854.50 | 9.7569630 | 9.8428046 |
| 52 | 57166.86 | 69674.51 | 121879.19 | 9.7571444 | 9.8430739 |
| 53 | 57190.73 | 69717.73 | 121903.90 | 9.7573256 | 9.8433432 |
| 54 | 57214.59 | 69760.97 | 121928.64 | 9.7575068 | 9.8436125 |
| 55 | 57238.44 | 69804.22 | 121953.39 | 9.7576878 | 9.8438817 |
| 56 | 57262.29 | 69847.49 | 121978.16 | 9.7578687 | 9.8441508 |
| 57 | 57286.14 | 69890.78 | 122002.96 | 9.7580495 | 9.8444199 |
| 58 | 57309.98 | 69934.09 | 122027.77 | 9.7582302 | 9.8446889 |
| 59 | 57333.81 | 69977.41 | 122052.60 | 9.7584108 | 9.8449579 |
| 60 | 57357.64 | 70020.75 | 122077.46 | 9.7585913 | 9.8452268 |

# 55 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 82412.62 | 145500.90 | 176551.73 | 9.9159937 | 10.1628657 |
| 29 | 82396.14 | 145410.27 | 176477.04 | 9.9159069 | 10.1625951 |
| 28 | 82379.65 | 145319.71 | 176402.43 | 9.9158200 | 10.1623245 |
| 27 | 82363.16 | 145229.23 | 176327.91 | 9.9157330 | 10.1620540 |
| 26 | 82346.66 | 145138.83 | 176253.45 | 9.9156460 | 10.1617836 |
| 25 | 82330.15 | 145048.50 | 176179.08 | 9.9155589 | 10.1615133 |
| 24 | 82313.64 | 144958.25 | 176104.78 | 9.9154718 | 10.1612429 |
| 23 | 82297.12 | 144868.08 | 176030.56 | 9.9153846 | 10.1609727 |
| 22 | 82280.59 | 144777.98 | 175956.42 | 9.9152974 | 10.1607025 |
| 21 | 82264.05 | 144687.96 | 175882.36 | 9.9152101 | 10.1604324 |
| 20 | 82247.51 | 144598.01 | 175808.37 | 9.9151228 | 10.1601623 |
| 19 | 82230.96 | 144508.14 | 175734.46 | 9.9150354 | 10.1598923 |
| 18 | 82214.40 | 144418.34 | 175660.63 | 9.9149479 | 10.1596224 |
| 17 | 82197.84 | 144328.62 | 175586.87 | 9.9148604 | 10.1593525 |
| 16 | 82181.27 | 144238.97 | 175513.19 | 9.9147729 | 10.1590826 |
| 15 | 82164.69 | 144149.40 | 175439.59 | 9.9146852 | 10.1588129 |
| 14 | 82148.11 | 144059.91 | 175366.07 | 9.9145976 | 10.1585431 |
| 13 | 82131.52 | 143970.49 | 175292.62 | 9.9145099 | 10.1582735 |
| 12 | 82114.92 | 143881.14 | 175219.24 | 9.9144221 | 10.1580039 |
| 11 | 82098.31 | 143791.87 | 175145.94 | 9.9143342 | 10.1577343 |
| 10 | 82081.70 | 143702.68 | 175072.73 | 9.9142464 | 10.1574649 |
| 9 | 82065.08 | 143613.56 | 174999.58 | 9.9141584 | 10.1571954 |
| 8 | 82048.46 | 143524.51 | 174926.51 | 9.9140704 | 10.1569261 |
| 7 | 82031.83 | 143435.54 | 174853.52 | 9.9139824 | 10.1566568 |
| 6 | 82015.19 | 143346.64 | 174780.60 | 9.9138943 | 10.1563875 |
| 5 | 81998.54 | 143257.81 | 174707.76 | 9.9138061 | 10.1561183 |
| 4 | 81981.89 | 143169.06 | 174634.99 | 9.9137179 | 10.1558492 |
| 3 | 81965.23 | 143080.39 | 174562.30 | 9.9136296 | 10.1555801 |
| 2 | 81948.56 | 142991.78 | 174489.69 | 9.9135413 | 10.1553111 |
| 1 | 81931.89 | 142903.26 | 174417.15 | 9.9134530 | 10.1550421 |
| 0 | 81915.21 | 142814.80 | 174344.68 | 9.9133645 | 10.1547732 |

## 35 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 57357.64 | 70020.75 | 122077.46 | 9.7585913 | 9.8452268 |
| 1 | 57381.47 | 70064.11 | 122102.33 | 9.7587717 | 9.8454956 |
| 2 | 57405.29 | 70107.49 | 122127.23 | 9.7589519 | 9.8457644 |
| 3 | 57429.11 | 70150.89 | 122152.15 | 9.7591321 | 9.8460332 |
| 4 | 57452.92 | 70194.30 | 122177.08 | 9.7593121 | 9.8463018 |
| 5 | 57476.72 | 70237.73 | 122202.04 | 9.7594920 | 9.8465705 |
| 6 | 57500.52 | 70281.18 | 122227.02 | 9.7596718 | 9.8468390 |
| 7 | 57524.32 | 70324.65 | 122252.02 | 9.7598515 | 9.8471075 |
| 8 | 57548.11 | 70368.13 | 122277.03 | 9.7600311 | 9.8473760 |
| 9 | 57571.90 | 70411.63 | 122302.07 | 9.7602106 | 9.8476444 |
| 10 | 57595.68 | 70455.15 | 122327.13 | 9.7603899 | 9.8479127 |
| 11 | 57619.46 | 70498.69 | 122352.21 | 9.7605692 | 9.8481810 |
| 12 | 57643.23 | 70542.24 | 122377.32 | 9.7607483 | 9.8484492 |
| 13 | 57667.00 | 70585.81 | 122402.44 | 9.7609274 | 9.8487174 |
| 14 | 57690.76 | 70629.40 | 122427.58 | 9.7611063 | 9.8489855 |
| 15 | 57714.52 | 70673.01 | 122452.74 | 9.7612851 | 9.8492536 |
| 16 | 57738.27 | 70716.64 | 122477.93 | 9.7614638 | 9.8495216 |
| 17 | 57762.02 | 70760.29 | 122503.13 | 9.7616424 | 9.8497896 |
| 18 | 57785.76 | 70803.95 | 122528.36 | 9.7618208 | 9.8500575 |
| 19 | 57809.50 | 70847.63 | 122553.61 | 9.7619992 | 9.8503253 |
| 20 | 57833.23 | 70891.33 | 122578.87 | 9.7621775 | 9.8505931 |
| 21 | 57856.96 | 70935.05 | 122604.16 | 9.7623556 | 9.8508608 |
| 22 | 57880.68 | 70978.78 | 122629.47 | 9.7625337 | 9.8511285 |
| 23 | 57904.40 | 71022.53 | 122654.80 | 9.7627116 | 9.8513961 |
| 24 | 57928.12 | 71066.30 | 122680.15 | 9.7628894 | 9.8516637 |
| 25 | 57951.83 | 71110.09 | 122705.52 | 9.7630671 | 9.8519312 |
| 26 | 57975.53 | 71153.90 | 122730.91 | 9.7632447 | 9.8321987 |
| 27 | 57999.23 | 71197.73 | 122756.33 | 9.7634222 | 9.8524661 |
| 28 | 58022.92 | 71241.57 | 122781.76 | 9.7635996 | 9.8527335 |
| 29 | 58046.61 | 71285.43 | 122807.21 | 9.7637769 | 9.8530008 |
| 30 | 68070.30 | 71329.31 | 122832.69 | 9.7639540 | 9.8532680 |

# 54 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 81915.21 | 142814.80 | 174344.68 | 9.9133645 | 10.1547732 |
| 59 | 81898.52 | 142726.42 | 174272.29 | 9.9132760 | 10.1545044 |
| 58 | 81881.82 | 142638.11 | 174199.97 | 9.9131875 | 10.1542356 |
| 57 | 81865.12 | 142549.87 | 174127.73 | 9.9130989 | 10.1539668 |
| 56 | 81848.41 | 142461.71 | 174055.56 | 9.9130102 | 10.1536982 |
| 55 | 81831.69 | 142373.62 | 173983.47 | 9.9129215 | 10.1534295 |
| 54 | 81814.97 | 142285.61 | 173911.45 | 9.9128328 | 10.1531610 |
| 53 | 81798.24 | 142197.66 | 173839.51 | 9.9127440 | 10.1528925 |
| 52 | 81781.50 | 142109.79 | 173767.64 | 9.9126551 | 10.1526240 |
| 51 | 81764.76 | 142022.00 | 173695.85 | 9.9125662 | 10.1523556 |
| 50 | 81748.01 | 141934.27 | 173624.13 | 9.9124772 | 10.1520873 |
| 49 | 81731.25 | 141846.62 | 173552.47 | 9.9123882 | 10.1518190 |
| 48 | 81714.49 | 141759.04 | 173480.90 | 9.9122991 | 10.1515508 |
| 47 | 81697.72 | 141671.53 | 173409.41 | 9.9122099 | 10.1512826 |
| 46 | 81680.94 | 141584.09 | 173337.98 | 9.9121207 | 10.1510145 |
| 45 | 81664.15 | 141496.73 | 173266.63 | 9.9120315 | 10.1507464 |
| 44 | 81647.36 | 141409.43 | 173195.35 | 9.9119422 | 10.1504784 |
| 43 | 81630.56 | 141322.21 | 173124.14 | 9.9118528 | 10.1502104 |
| 42 | 81613.76 | 141235.06 | 173053.01 | 9.9117634 | 10.1499425 |
| 41 | 81596.95 | 141147.99 | 172981.95 | 9.9116739 | 10.1496747 |
| 40 | 81580.13 | 141060.98 | 172910.96 | 9.9115844 | 10.1494069 |
| 39 | 81563.30 | 140974.05 | 172840.05 | 9.9114948 | 10.1491392 |
| 38 | 81546.47 | 140887.18 | 172769.21 | 9.9114051 | 10.1488715 |
| 37 | 81529.63 | 140800.39 | 172698.44 | 9.9113155 | 10.1486039 |
| 36 | 81512.78 | 140713.67 | 172627.74 | 9.9112257 | 10.1483363 |
| 35 | 81495.93 | 140627.02 | 172557.12 | 9.9111359 | 10.1480688 |
| 34 | 81479.06 | 140540.44 | 172486.57 | 9.9110460 | 10.1478013 |
| 33 | 81462.19 | 140453.93 | 172416.09 | 9.9109561 | 10.1475339 |
| 32 | 81445.32 | 140367.49 | 172345.68 | 9.9108661 | 10.1472665 |
| 31 | 81428.44 | 140281.13 | 172275.34 | 9.9107761 | 10.1469992 |
| 30 | 81411.55 | 140194.83 | 172205.08 | 9.9106860 | 10.1467320 |

# 35 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan* |
|---|---|---|---|---|---|
| 30 | 58070.30 | 71329.31 | 122832.69 | 9.7639540 | 9.8532680 |
| 31 | 58093.98 | 71373.21 | 122858.19 | 9.7641311 | 9.8535352 |
| 32 | 58117.65 | 71417.13 | 122883.71 | 9.7643080 | 9.8538023 |
| 33 | 58141.32 | 71461.06 | 122909.25 | 9.7644849 | 9.8540694 |
| 34 | 58164.98 | 71505.01 | 122934.81 | 9.7646616 | 9.8543365 |
| 35 | 58188.64 | 71548.98 | 122960.39 | 9.7648382 | 9.8546034 |
| 36 | 58212.30 | 71592.97 | 122985.99 | 9.7650147 | 9.8548704 |
| 37 | 58235.95 | 71636.98 | 123011.61 | 9.7651911 | 9.8551372 |
| 38 | 58259.59 | 71681.01 | 123037.25 | 9.7653674 | 9.8554041 |
| 39 | 58283.23 | 71725.05 | 123062.92 | 9.7655436 | 9.8556708 |
| 40 | 58306.87 | 71769.11 | 123088.61 | 9.7657197 | 9.8559376 |
| 41 | 58330.50 | 71813.19 | 123114.32 | 9.7658957 | 9.8562042 |
| 42 | 58354.12 | 71857.29 | 123140.05 | 9.7660715 | 9.8564708 |
| 43 | 58377.74 | 71901.41 | 123165.80 | 9.7662473 | 9.8567374 |
| 44 | 58401.36 | 71945.55 | 123191.57 | 9.7664229 | 9.8570039 |
| 45 | 58424.97 | 71989.70 | 123217.36 | 9.7665985 | 9.8572704 |
| 46 | 58448.57 | 72033.87 | 123243.17 | 9.7667739 | 9.8575368 |
| 47 | 58472.17 | 72078.06 | 123269.00 | 9.7669492 | 9.8578031 |
| 48 | 58495.77 | 72122.27 | 123294.86 | 9.7671244 | 9.8580694 |
| 49 | 58519.36 | 72166.50 | 123320.74 | 9.7672996 | 9.8583357 |
| 50 | 58542.94 | 72210.75 | 123346.64 | 9.7674746 | 9.8586019 |
| 51 | 58566.52 | 72255.02 | 123372.56 | 9.7676494 | 9.8588680 |
| 52 | 58590.10 | 72299.31 | 123398.50 | 9.7678242 | 9.8591341 |
| 53 | 58613.67 | 72343.61 | 123424.46 | 9.7679989 | 9.8594002 |
| 54 | 58637.24 | 72387.93 | 123450.44 | 9.7681735 | 9.8596661 |
| 55 | 58660.80 | 72432.27 | 123476.45 | 9.7683480 | 9.8599321 |
| 56 | 58684.35 | 72476.63 | 123502.48 | 9.7685223 | 9.8601980 |
| 57 | 58707.90 | 72521.01 | 123528.52 | 9.7686966 | 9.8604638 |
| 58 | 58731.45 | 72565.41 | 123554.59 | 9.7688707 | 9.8607296 |
| 59 | 58754.99 | 72609.83 | 123580.68 | 9.7690448 | 9.8609954 |
| 60 | 58778.53 | 72654.26 | 123606.80 | 9.7692187 | 9.8612610 |

# 54 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 81411.55 | 140194.83 | 172205.08 | 9.9106860 | 10.1467320 |
| 29 | 81394.65 | 140108.60 | 172134.89 | 9.9105959 | 10.1464648 |
| 28 | 81377.75 | 140022.45 | 172064.77 | 9.9105057 | 10.1461977 |
| 27 | 81360.84 | 139936.36 | 171994.72 | 9.9104155 | 10.1459306 |
| 26 | 81343.93 | 139850.34 | 171924.75 | 9.9103251 | 10.1456635 |
| 25 | 81327.01 | 139764.40 | 171854.84 | 9.9102348 | 10.1453966 |
| 24 | 81310.08 | 139678.52 | 171785.01 | 9.9101444 | 10.1451296 |
| 23 | 81293.14 | 139592.72 | 171715.25 | 9.9100539 | 10.1448628 |
| 22 | 81276.20 | 139506.98 | 171645.56 | 9.9099634 | 10.1445959 |
| 21 | 81259.25 | 139421.31 | 171575.94 | 9.9098728 | 10.1443292 |
| 20 | 81242.29 | 139335.71 | 171506.39 | 9.9097821 | 10.1440624 |
| 19 | 81225.32 | 139250.18 | 171436.91 | 9.9096915 | 10.1437958 |
| 18 | 81208.35 | 139164.73 | 171367.50 | 9.9096007 | 10.1435292 |
| 17 | 81191.37 | 139079.34 | 171298.17 | 9.9095099 | 10.1432626 |
| 16 | 81174.39 | 138994.01 | 171228.90 | 9.9094190 | 10.1429961 |
| 15 | 81157.40 | 138908.76 | 171159.70 | 9.9093281 | 10.1427296 |
| 14 | 81140.40 | 138823.58 | 171090.58 | 9.9092371 | 10.1424632 |
| 13 | 81123.39 | 138738.46 | 171021.52 | 9.9091461 | 10.1421969 |
| 12 | 81106.38 | 138653.42 | 170952.54 | 9.9090550 | 10.1419306 |
| 11 | 81089.36 | 138568.44 | 170883.62 | 9.9089639 | 10.1416643 |
| 10 | 81072.33 | 138483.53 | 170814.78 | 9.9088727 | 10.1413981 |
| 9 | 81055.30 | 138398.69 | 170746.00 | 9.9087814 | 10.1411320 |
| 8 | 81038.26 | 138313.92 | 170677.30 | 9.9086901 | 10.1408659 |
| 7 | 81021.21 | 138229.22 | 170608.66 | 9.9085988 | 10.1405998 |
| 6 | 81004.16 | 138144.58 | 170540.10 | 9.9085073 | 10.1403339 |
| 5 | 80987.10 | 138060.01 | 170471.60 | 9.9084159 | 10.1400679 |
| 4 | 80970.03 | 137975.51 | 170403.18 | 9.9083243 | 10.1398020 |
| 3 | 80952.96 | 137891.08 | 170334.82 | 9.9082327 | 10.1395362 |
| 2 | 80935.88 | 137806.72 | 170266.53 | 9.9081411 | 10.1392704 |
| 1 | 80918.79 | 137722.42 | 170198.31 | 9.9080494 | 10.1390046 |
| 0 | 80901.70 | 137638.19 | 170130.16 | 9.9079576 | 10.1387390 |

# 36 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 58778.53 | 72654.26 | 123606.80 | 9.7692187 | 9.8612610 |
| 1 | 58802.06 | 72698.71 | 123632.94 | 9.7693925 | 9.8615267 |
| 2 | 58825.58 | 72743.18 | 123659.09 | 9.7695662 | 9.8617923 |
| 3 | 58849.10 | 72787.67 | 123685.26 | 9.7697398 | 9.8620578 |
| 4 | 58872.62 | 72832.18 | 123711.48 | 9.7699134 | 9.8623233 |
| 5 | 58896.13 | 72876.71 | 123737.68 | 9.7700868 | 9.8625887 |
| 6 | 58919.64 | 72921.26 | 123763.93 | 9.7702601 | 9.8628541 |
| 7 | 58943.14 | 72965.82 | 123790.19 | 9.7704332 | 9.8631195 |
| 8 | 58966.63 | 73010.40 | 123816.47 | 9.7706063 | 9.8633848 |
| 9 | 58990.12 | 73055.01 | 123842.78 | 9.7707793 | 9.8636500 |
| 10 | 59013.61 | 73099.63 | 123869.11 | 9.7709522 | 9.8639152 |
| 11 | 59037.09 | 73144.27 | 123895.46 | 9.7711249 | 9.8641803 |
| 12 | 59060.57 | 73188.94 | 123921.83 | 9.7712976 | 9.8644454 |
| 13 | 59084.04 | 73233.62 | 123948.22 | 9.7714702 | 9.8647105 |
| 14 | 59107.50 | 73278.31 | 123974.64 | 9.7716426 | 9.8649755 |
| 15 | 59130.96 | 73323.03 | 124001.08 | 9.7718150 | 9.8652404 |
| 16 | 59154.42 | 73367.77 | 124027.54 | 9.7719872 | 9.8655053 |
| 17 | 59177.87 | 73412.53 | 124054.02 | 9.7721593 | 9.8657702 |
| 18 | 59201.32 | 73457.30 | 124080.52 | 9.7723314 | 9.8660350 |
| 19 | 59224.76 | 73502.10 | 124107.04 | 9.7725033 | 9.8662997 |
| 20 | 59248.19 | 73546.91 | 124133.59 | 9.7726751 | 9.8665644 |
| 21 | 59271.62 | 73591.74 | 124160.16 | 9.7728468 | 9.8668291 |
| 22 | 59295.05 | 73636.60 | 124186.75 | 9.7730185 | 9.8670937 |
| 23 | 59318.47 | 73681.47 | 124213.36 | 9.7731900 | 9.8673583 |
| 24 | 59341.89 | 73726.36 | 124239.99 | 9.7733614 | 9.8676228 |
| 25 | 59365.30 | 73771.27 | 124266.65 | 9.7735327 | 9.8678873 |
| 26 | 59388.71 | 73816.20 | 124293.33 | 9.7737039 | 9.8681517 |
| 27 | 59412.11 | 73861.15 | 124320.03 | 9.7738749 | 9.8684160 |
| 28 | 59435.50 | 73906.11 | 124346.75 | 9.7740459 | 9.8686804 |
| 29 | 59458.89 | 73951.10 | 124373.49 | 9.7742168 | 9.8689446 |
| 30 | 59482.28 | 73996.11 | 124400.26 | 9.7743876 | 9.8692089 |

# 53 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 80901.70 | 137638.19 | 170130.16 | 9.9079576 | 10.1387390 |
| 59 | 80884.60 | 137554.03 | 170062.08 | 9.9078658 | 10.1384733 |
| 58 | 80867.49 | 137469.94 | 169994.07 | 9.9077740 | 10.1382077 |
| 57 | 80850.37 | 137385.91 | 169926.12 | 9.9076820 | 10.1379422 |
| 56 | 80833.25 | 137301.95 | 169858.25 | 9.9075901 | 10.1376767 |
| 55 | 80816.12 | 137218.05 | 169790.44 | 9.9074980 | 10.1374113 |
| 54 | 80798.99 | 137134.23 | 169722.71 | 9.9074059 | 10.1371459 |
| 53 | 80781.85 | 137050.47 | 169655.04 | 9.9073138 | 10.1368805 |
| 52 | 80764.70 | 136966.78 | 169587.43 | 9.9072216 | 10.1366152 |
| 51 | 80747.54 | 136883.15 | 169519.90 | 9.9071293 | 10.1363500 |
| 50 | 80730.38 | 136799.59 | 169452.44 | 9.9070370 | 10.1360848 |
| 49 | 80713.21 | 136716.10 | 169385.04 | 9.9069446 | 10.1358197 |
| 48 | 80696.03 | 136632.67 | 169317.71 | 9.9068522 | 10.1355546 |
| 47 | 80678.85 | 136549.31 | 169250.45 | 9.9067597 | 10.1352895 |
| 46 | 80661.66 | 136466.02 | 169183.26 | 9.9066671 | 10.1350245 |
| 45 | 80644.46 | 136382.79 | 169116.13 | 9.9065745 | 10.1347596 |
| 44 | 80627.26 | 136299.63 | 169049.07 | 9.9064819 | 10.1344947 |
| 43 | 80610.05 | 136216.53 | 168982.08 | 9.9063892 | 10.1342298 |
| 42 | 80592.83 | 136133.50 | 168915.16 | 9.9062964 | 10.1339650 |
| 41 | 80575.60 | 136050.54 | 168848.30 | 9.9062036 | 10.1337003 |
| 40 | 80558.37 | 135967.64 | 168781.51 | 9.9061107 | 10.1334356 |
| 39 | 80541.13 | 135884.81 | 168714.79 | 9.9060177 | 10.1331709 |
| 38 | 80523.89 | 135802.04 | 168648.14 | 9.9059247 | 10.1329063 |
| 37 | 80506.64 | 135719.34 | 168581.55 | 9.9058317 | 10.1326417 |
| 36 | 80489.38 | 135636.70 | 168515.03 | 9.9057386 | 10.1323772 |
| 35 | 80472.11 | 135554.13 | 168448.57 | 9.9056454 | 10.1321127 |
| 34 | 80454.84 | 135471.62 | 168382.18 | 9.9055522 | 10.1318483 |
| 33 | 80437.56 | 135389.18 | 168315.86 | 9.9054589 | 10.1315840 |
| 32 | 80420.28 | 135306.80 | 168249.61 | 9.9053656 | 10.1313196 |
| 31 | 80402.99 | 135224.49 | 168183.42 | 9.9052722 | 10.1310554 |
| 30 | 80385.69 | 135142.24 | 168117.30 | 9.9051787 | 10.1307911 |

## 36 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 59482.28 | 73996.11 | 124400.26 | 9.7743876 | 9.8692089 |
| 31 | 59505.66 | 74041.14 | 124427.05 | 9.7745583 | 9.8694731 |
| 32 | 59529.03 | 74086.18 | 124453.86 | 9.7747288 | 9.8697372 |
| 33 | 59552.40 | 74131.24 | 124480.69 | 9.7748993 | 9.8700013 |
| 34 | 59575.77 | 74176.33 | 124507.54 | 9.7750697 | 9.8702653 |
| 35 | 59599.13 | 74221.43 | 124534.42 | 9.7752399 | 9.8705293 |
| 36 | 59622.49 | 74266.55 | 124561.31 | 9.7754101 | 9.8707933 |
| 37 | 59645.84 | 74311.70 | 124588.23 | 9.7755801 | 9.8710572 |
| 38 | 59669.18 | 74356.86 | 124615.18 | 9.7757501 | 9.8713210 |
| 39 | 59692.52 | 74402.04 | 124642.14 | 9.7759199 | 9.8715848 |
| 40 | 59715.86 | 74447.24 | 124669.13 | 9.7760897 | 9.8718486 |
| 41 | 59739.19 | 74492.46 | 124696.14 | 9.7762593 | 9.8721123 |
| 42 | 59762.51 | 74537.70 | 124723.17 | 9.7764289 | 9.8723760 |
| 43 | 59785.83 | 74582.96 | 124750.22 | 9.7765983 | 9.8726396 |
| 44 | 59809.15 | 74628.24 | 124777.30 | 9.7767676 | 9.8729032 |
| 45 | 59832.46 | 74673.54 | 124804.40 | 9.7769369 | 9.8731668 |
| 46 | 59855.76 | 74718.86 | 124831.52 | 9.7771060 | 9.8734302 |
| 47 | 59879.06 | 74764.20 | 124858.66 | 9.7772750 | 9.8736937 |
| 48 | 59902.36 | 74809.56 | 124885.83 | 9.7774439 | 9.8739571 |
| 49 | 59925.65 | 74854.94 | 124913.02 | 9.7776128 | 9.8742204 |
| 50 | 59948.93 | 74900.33 | 124940.23 | 9.7777815 | 9.8744838 |
| 51 | 59972.21 | 74945.75 | 124967.46 | 9.7779501 | 9.8747470 |
| 52 | 59995.49 | 74991.19 | 124994.71 | 9.7781186 | 9.8750102 |
| 53 | 60018.76 | 75036.65 | 125021.99 | 9.7782870 | 9.8752734 |
| 54 | 60042.02 | 75082.12 | 125049.29 | 9.7784553 | 9.8755365 |
| 55 | 60065.28 | 75127.62 | 125076.61 | 9.7786235 | 9.8757996 |
| 56 | 60088.53 | 75173.14 | 125103.96 | 9.7787916 | 9.8760627 |
| 57 | 60111.78 | 75218.67 | 125131.33 | 9.7789596 | 9.8763257 |
| 58 | 60135.03 | 75264.23 | 125158.72 | 9.7791275 | 9.8765886 |
| 59 | 60158.27 | 75309.81 | 125186.13 | 9.7792953 | 9.8768515 |
| 60 | 60181.50 | 75355.40 | 125213.57 | 9.7794630 | 9.8771144 |

# 53 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 80385.69 | 135142.24 | 168117.30 | 9.9051787 | 10.1307911 |
| 29 | 80368.38 | 135060.06 | 168051.24 | 9.9050852 | 10.1305269 |
| 28 | 80351.07 | 134977.94 | 167985.25 | 9.9049916 | 10.1302628 |
| 27 | 80333.75 | 134895.89 | 167919.33 | 9.9048980 | 10.1299987 |
| 26 | 80316.42 | 134813.90 | 167853.47 | 9.9048043 | 10.1297347 |
| 25 | 80299.09 | 134731.97 | 167787.68 | 9.9047106 | 10.1294707 |
| 24 | 80281.75 | 134650.11 | 167721.95 | 9.9046168 | 10.1292067 |
| 23 | 80264.40 | 134568.32 | 167656.29 | 9.9045230 | 10.1289428 |
| 22 | 80247.05 | 134486.58 | 167590.70 | 9.9044291 | 10.1286790 |
| 21 | 80229.69 | 134404.92 | 167525.17 | 9.9043351 | 10.1284152 |
| 20 | 80212.32 | 134323.31 | 167459.70 | 9.9042411 | 10.1281514 |
| 19 | 80194.94 | 134241.77 | 167394.30 | 9.9041470 | 10.1278877 |
| 18 | 80177.56 | 134160.29 | 167328.97 | 9.9040529 | 10.1276240 |
| 17 | 80160.17 | 134078.88 | 167263.70 | 9.9039587 | 10.1273604 |
| 16 | 80142.78 | 133997.53 | 167198.50 | 9.9038644 | 10.1270968 |
| 15 | 80125.38 | 133916.24 | 167133.36 | 9.9037701 | 10.1268332 |
| 14 | 80107.97 | 133835.02 | 167068.28 | 9.9036757 | 10.1265698 |
| 13 | 80090.56 | 133753.86 | 167003.28 | 9.9035813 | 10.1263063 |
| 12 | 80073.14 | 133672.76 | 166938.33 | 9.9034868 | 10.1260429 |
| 11 | 80055.71 | 133591.72 | 166873.45 | 9.9033923 | 10.1257796 |
| 10 | 80038.27 | 133510.75 | 166808.64 | 9.9032977 | 10.1255162 |
| 9 | 80020.83 | 133429.84 | 166743.89 | 9.9032031 | 10.1252530 |
| 8 | 80003.38 | 133349.00 | 166679.20 | 9.9031084 | 10.1249898 |
| 7 | 79985.93 | 133268.22 | 166614.58 | 9.9030136 | 10.1247266 |
| 6 | 79968.47 | 133187.49 | 166550.02 | 9.9029188 | 10.1244635 |
| 5 | 79951.00 | 133106.84 | 166485.52 | 9.9028239 | 10.1242004 |
| 4 | 79933.52 | 133026.24 | 166421.09 | 9.9027289 | 10.1239373 |
| 3 | 79916.04 | 132945.71 | 166356.73 | 9.9026339 | 10.1236743 |
| 2 | 79898.55 | 132865.24 | 166292.43 | 9.9025389 | 10.1234114 |
| 1 | 79881.05 | 132784.83 | 166228.19 | 9.9024438 | 10.1231485 |
| 0 | 79863.55 | 132704.48 | 166164.01 | 9.9023486 | 10.1228856 |

# 37 Grad.

| Minut. | Sinus | Tang. | Seçans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 60181.50 | 75355.40 | 125213.57 | 9.7794630 | 9.8771144 |
| 1 | 60204.73 | 75401.02 | 125241.02 | 9.7796306 | 9.8773772 |
| 2 | 60227.95 | 75446.66 | 135268.50 | 9.7797981 | 9.8776400 |
| 3 | 60251.17 | 75492.32 | 125296.01 | 9.7799655 | 9.8779027 |
| 4 | 60274.39 | 75537.99 | 125323.53 | 9.7801328 | 9.8781654 |
| 5 | 60297.60 | 75583.69 | 125351.08 | 9.7803000 | 9.8784281 |
| 6 | 60320.80 | 75629.41 | 125378.65 | 9.7804671 | 9.8786907 |
| 7 | 60344.00 | 75675.14 | 125406.25 | 9.7806341 | 9.8789533 |
| 8 | 60367.19 | 75720.90 | 125433.87 | 9.7808010 | 9.8792158 |
| 9 | 60390.38 | 75766.68 | 125461.51 | 9.7809677 | 9.8794782 |
| 10 | 60413.56 | 75812.48 | 125489.17 | 9.7811344 | 9.8797407 |
| 11 | 60436.74 | 75858.29 | 125516.85 | 9.7813010 | 9.8800031 |
| 12 | 60459.91 | 75904.13 | 125544.56 | 9.7814675 | 9.8802654 |
| 13 | 60483.08 | 75949.99 | 125572.29 | 9.7816339 | 9.8805277 |
| 14 | 60506.24 | 75995.87 | 125600.05 | 9.7818002 | 9.8807900 |
| 15 | 60529.40 | 76041.77 | 125627.82 | 9.7819664 | 9.8810522 |
| 16 | 60552.55 | 76087.69 | 125655.62 | 9.7821324 | 9.8813144 |
| 17 | 60575.70 | 76133.63 | 125683.45 | 9.7822984 | 9.8815765 |
| 18 | 60598.84 | 76179.59 | 125711.29 | 9.7824643 | 9.8818386 |
| 19 | 60621.98 | 76225.57 | 125739.16 | 9.7826301 | 9.8821007 |
| 20 | 60645.11 | 76271.57 | 125767.05 | 9.7827958 | 9.8823627 |
| 21 | 60668.23 | 76317.59 | 125794.97 | 9.7829614 | 9.8826246 |
| 22 | 60691.35 | 76363.63 | 125822.91 | 9.7831268 | 9.8828866 |
| 23 | 60714.47 | 76409.69 | 125850.87 | 9.7832922 | 9.8831484 |
| 24 | 60737.58 | 75455.77 | 125878.85 | 9.7834575 | 9.8834103 |
| 25 | 60760.69 | 76501.88 | 125906.86 | 9.7836227 | 9.8836721 |
| 26 | 60783.79 | 76548.00 | 125934.89 | 9.7837878 | 9.8839338 |
| 27 | 60806.89 | 76594.14 | 125962.94 | 9.7839528 | 9.8841956 |
| 28 | 60829.98 | 76640.31 | 125991.02 | 9.7841177 | 9.8844572 |
| 29 | 60853.06 | 76686.49 | 126019.12 | 9.7842824 | 9.8847189 |
| 30 | 60876.14 | 76732.70 | 126047.24 | 9.7844471 | 9.8849805 |

## 52 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 79863.55 | 132704.48 | 166164.01 | 9.9023486 | 10.1228856 |
| 59 | 79846.04 | 132624.20 | 166099.90 | 9.9022534 | 10.1226228 |
| 58 | 79828.52 | 132543.97 | 166035.85 | 9.9021581 | 10.1223600 |
| 57 | 79811.00 | 132463.81 | 165971.87 | 9.9020628 | 10.1220973 |
| 56 | 79793.47 | 132383.71 | 165907.95 | 9.9019674 | 10.1218346 |
| 55 | 79775.93 | 132303.68 | 165844.09 | 9.9018719 | 10.1215719 |
| 54 | 79758.39 | 132223.70 | 165780.30 | 9.9017764 | 10.1213093 |
| 53 | 79740.84 | 132143.79 | 165716.57 | 9.9016808 | 10.1210467 |
| 52 | 79723.28 | 132063.93 | 165652.90 | 9.9015852 | 10.1207842 |
| 51 | 79705.72 | 131984.14 | 165589.29 | 9.9014895 | 10.1205218 |
| 50 | 79688.15 | 131904.41 | 165525.75 | 9.9013938 | 10.1202593 |
| 49 | 79670.57 | 131824.74 | 165462.27 | 9.9012980 | 10.1199969 |
| 48 | 79652.99 | 131745.13 | 165398.85 | 9.9012021 | 10.1197346 |
| 47 | 79635.40 | 131665.59 | 165335.50 | 9.9011062 | 10.1194723 |
| 46 | 79617.80 | 131586.10 | 165272.21 | 9.9010102 | 10.1192100 |
| 45 | 79600.20 | 131506.68 | 165208.98 | 9.9009142 | 10.1189478 |
| 44 | 79582.59 | 131427.31 | 165145.81 | 9.9008181 | 10.1186856 |
| 43 | 79564.97 | 131348.01 | 165082.70 | 9.9007219 | 10.1184235 |
| 42 | 79547.35 | 131268.76 | 165019.66 | 9.9006257 | 10.1181614 |
| 41 | 79529.72 | 131189.58 | 164956.68 | 9.9005294 | 10.1178993 |
| 40 | 79512.08 | 131110.46 | 164893.76 | 9.9004331 | 10.1176373 |
| 39 | 79494.43 | 131031.40 | 164830.90 | 9.9003367 | 10.1173754 |
| 38 | 79476.78 | 130952.39 | 164768.11 | 9.9002403 | 10.1171134 |
| 37 | 79459.12 | 130873.45 | 164705.37 | 9.9001438 | 10.1168516 |
| 36 | 79441.46 | 130794.57 | 164642.70 | 9.9000472 | 10.1165897 |
| 35 | 79423.79 | 130715.75 | 164580.09 | 9.8999506 | 10.1163279 |
| 34 | 79406.11 | 130636.99 | 164517.54 | 9.8998539 | 10.1160662 |
| 33 | 79388.43 | 130558.28 | 164455.06 | 9.8997572 | 10.1158044 |
| 32 | 79370.74 | 130479.64 | 164392.63 | 9.8996604 | 10.1155428 |
| 31 | 79353.04 | 130401.06 | 164330.27 | 9.8995636 | 10.1152811 |
| 30 | 79335.33 | 130322.54 | 164267.96 | 9.8994667 | 10.1150195 |

# 37 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 60876.14 | 76732.70 | 126047.24 | 9.7844471 | 9.8849805 |
| 31 | 60899.22 | 76778.93 | 126075.39 | 9.7846117 | 9.8852420 |
| 32 | 60922.29 | 76825.17 | 126103.56 | 9.7847762 | 9.8855035 |
| 33 | 60945.35 | 76871.44 | 126131.75 | 9.7849406 | 9.8857650 |
| 34 | 60968.41 | 76917.73 | 126159.97 | 9.7851049 | 9.8860264 |
| 35 | 60991.47 | 76964.04 | 126188.20 | 9.7852691 | 9.8862878 |
| 36 | 61014.52 | 77010.37 | 126216.46 | 9.7854332 | 9.8865492 |
| 37 | 61037.56 | 77056.72 | 126244.75 | 9.7855972 | 9.8868105 |
| 38 | 61060.60 | 77103.09 | 126273.06 | 9.7857611 | 9.8870718 |
| 39 | 61083.63 | 77149.48 | 126301.40 | 9.7859249 | 9.8873330 |
| 40 | 61106.66 | 77195.89 | 126329.75 | 9.7860886 | 9.8875942 |
| 41 | 61129.68 | 77242.33 | 126358.13 | 9.7862522 | 9.8878554 |
| 42 | 61152.70 | 77288.79 | 126386.53 | 9.7864157 | 9.8881165 |
| 43 | 61175.72 | 77335.26 | 126414.96 | 9.7865791 | 9.8883775 |
| 44 | 61198.73 | 77381.75 | 126443.41 | 9.7867424 | 9.8886386 |
| 45 | 61221.73 | 77428.27 | 126471.88 | 9.7869056 | 9.8888996 |
| 46 | 61244.73 | 77474.81 | 126500.38 | 9.7870687 | 9.8891605 |
| 47 | 61267.72 | 77521.37 | 126528.90 | 9.7872317 | 9.8894214 |
| 48 | 61290.71 | 77567.95 | 126557.45 | 9.7873946 | 9.8896823 |
| 49 | 61313.69 | 77614.55 | 126586.01 | 9.7875574 | 9.8899432 |
| 50 | 61336.66 | 77661.17 | 126614.60 | 9.7877202 | 9.8902040 |
| 51 | 61359.63 | 77707.82 | 126643.22 | 9.7878828 | 9.8904647 |
| 52 | 61382.60 | 77754.48 | 126671.86 | 9.7880453 | 9.8907254 |
| 53 | 61405.56 | 77801.17 | 126700.52 | 9.7882077 | 9.8909861 |
| 54 | 61428.52 | 77847.88 | 126729.21 | 9.7883701 | 9.8912468 |
| 55 | 61451.47 | 77894.60 | 126757.92 | 9.7885323 | 9.8915074 |
| 56 | 61474.42 | 77941.35 | 126786.65 | 9.7886944 | 9.8917679 |
| 57 | 61497.36 | 77988.12 | 126815.41 | 9.7888565 | 9.8920285 |
| 58 | 61520.29 | 78034.92 | 126844.19 | 9.7890184 | 9.8922890 |
| 59 | 61543.22 | 78081.73 | 126872.99 | 9.7891802 | 9.8925494 |
| 60 | 61566.15 | 78128.56 | 126901.82 | 9.7893420 | 9.8928098 |

# 52 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 79335.33 | 130322.54 | 164267.96 | 9.8994667 | 10.1150195 |
| 29 | 79317.62 | 130244.07 | 164205.72 | 9.8993697 | 10.1147580 |
| 28 | 79299.90 | 130165.67 | 164143.54 | 9.8992727 | 10.1144965 |
| 27 | 79282.18 | 130087.32 | 164081.42 | 9.8991756 | 10.1142350 |
| 26 | 79264.45 | 130009.04 | 164019.36 | 9.8990784 | 10.1139736 |
| 25 | 79246.71 | 129930.81 | 163957.36 | 9.8989812 | 10.1137122 |
| 24 | 79228.96 | 129852.65 | 163895.42 | 9.8988840 | 10.1134508 |
| 23 | 79211.21 | 129774.54 | 163833.55 | 9.8987867 | 10.1131895 |
| 22 | 79193.45 | 129696.49 | 163771.73 | 9.8986893 | 10.1129282 |
| 21 | 79175.69 | 129618.50 | 163709.97 | 9.8985919 | 10.1126670 |
| 20 | 79157.92 | 129540.57 | 163648.28 | 9.8984944 | 10.1124058 |
| 19 | 79140.14 | 129462.69 | 163586.64 | 9.8983968 | 10.1121446 |
| 18 | 79122.35 | 129384.88 | 163525.07 | 9.8982992 | 10.1118835 |
| 17 | 79104.56 | 129307.12 | 163463.55 | 9.8982015 | 10.1116225 |
| 16 | 79086.76 | 129229.43 | 163402.10 | 9.8981038 | 10.1113614 |
| 15 | 79068.96 | 129151.79 | 163340.70 | 9.8980060 | 10.1111004 |
| 14 | 79051.15 | 129074.21 | 163279.37 | 9.8979082 | 10.1108395 |
| 13 | 79033.33 | 128996.69 | 163218.09 | 9.8978103 | 10.1105786 |
| 12 | 79015.50 | 128919.22 | 163156.88 | 9.8977123 | 10.1103177 |
| 11 | 78997.67 | 128841.82 | 163095.72 | 9.8976143 | 10.1100568 |
| 10 | 78979.83 | 128764.47 | 163034.62 | 9.8975162 | 10.1097960 |
| 9 | 78961.98 | 128687.18 | 162973.59 | 9.8974181 | 10.1095353 |
| 8 | 78944.13 | 128609.95 | 162912.61 | 9.8973199 | 10.1092746 |
| 7 | 78926.27 | 128532.77 | 162851.69 | 9.8972216 | 10.1090139 |
| 6 | 78908.41 | 128455.66 | 162790.83 | 9.8971233 | 10.1087532 |
| 5 | 78890.54 | 128378.60 | 162730.03 | 9.8970249 | 10.1084926 |
| 4 | 78872.66 | 128301.60 | 162669.29 | 9.8969265 | 10.1082321 |
| 3 | 78854.77 | 128224.66 | 162608.61 | 9.8968280 | 10.1079715 |
| 2 | 78836.88 | 128147.76 | 162547.99 | 9.8967294 | 10.1077110 |
| 1 | 78818.98 | 128070.93 | 162487.43 | 9.8966308 | 10.1074506 |
| 0 | 78801.07 | 127994.16 | 162426.92 | 9.8965321 | 10.1071902 |

## 38 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 61566.15 | 78128.56 | 126901.82 | 9.7893420 | 9.8928098 |
| 1 | 61589.07 | 78175.42 | 126930.67 | 9.7895036 | 9.8930702 |
| 2 | 61611.98 | 78222.29 | 126959.55 | 9.7896652 | 9.8933306 |
| 3 | 61634.89 | 78269.19 | 126988.45 | 9.7898266 | 9.8935909 |
| 4 | 61657.79 | 78316.11 | 127017.37 | 9.7899880 | 9.8938511 |
| 5 | 61680.69 | 78363.05 | 127046.32 | 9.7901493 | 9.8941114 |
| 6 | 61703.59 | 78410.02 | 127075.29 | 9.7903104 | 9.8943715 |
| 7 | 61726.48 | 78457.00 | 127104.29 | 9.7904715 | 9.8946317 |
| 8 | 61749.36 | 78504.00 | 127133.31 | 9.7906325 | 9.8948918 |
| 9 | 61772.24 | 78551.03 | 127162.35 | 9.7907933 | 9.8951519 |
| 10 | 61795.11 | 78598.08 | 127191.42 | 9.7909541 | 9.8954119 |
| 11 | 61817.98 | 78645.15 | 127220.51 | 9.7911148 | 9.8956719 |
| 12 | 61840.84 | 78692.24 | 127249.63 | 9.7912754 | 9.8959319 |
| 13 | 61863.70 | 78739.35 | 127278.77 | 9.7914359 | 9.8961918 |
| 14 | 61886.55 | 78786.49 | 127307.94 | 9.7915963 | 9.8964517 |
| 15 | 61909.40 | 78833.64 | 127337.12 | 9.7917566 | 9.8967116 |
| 16 | 61932.24 | 78880.82 | 127366.34 | 9.7919168 | 9.8969714 |
| 17 | 61955.07 | 78928.02 | 127395.57 | 9.7920769 | 9.8972312 |
| 18 | 61977.90 | 78975.24 | 127424.84 | 9.7922369 | 9.8974910 |
| 19 | 62000.73 | 79022.48 | 127454.12 | 9.7923968 | 9.8977507 |
| 20 | 62023.55 | 79069.75 | 127483.43 | 9.7925566 | 9.8980104 |
| 21 | 62046.36 | 79117.03 | 127512.76 | 9.7927163 | 9.8982700 |
| 22 | 62069.17 | 79164.34 | 127542.12 | 9.7928760 | 9.8985296 |
| 23 | 62091.98 | 79211.67 | 127571.50 | 9.7930355 | 9.8987892 |
| 24 | 62114.78 | 79259.02 | 127600.91 | 9.7931949 | 9.8990487 |
| 25 | 62137.57 | 79306.40 | 127630.34 | 9.7933543 | 9.8993082 |
| 26 | 62160.36 | 79353.[illegible]9 | 127659.80 | 9.7935135 | 9.8995677 |
| 27 | 62183.14 | 79401.21 | 127689.28 | 9.7936727 | 9.8998271 |
| 28 | 62205.92 | 79448.65 | 127718.78 | 9.7938317 | 9.9000865 |
| 29 | 62228.69 | 79496.11 | 127748.31 | 9.7939907 | 9.9003459 |
| 30 | 62251.46 | 79543.59 | 127777.87 | 9.7941496 | 9.9006052 |

# 51 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 78801.97 | 127994.16 | 162426.92 | 9.8965321 | 10.1071902 |
| 59 | 78783.16 | 127917.45 | 162366.48 | 9.8964334 | 10.1069298 |
| 58 | 78765.24 | 127840.79 | 162306.09 | 9.8963346 | 10.1066694 |
| 57 | 78747.32 | 127764.19 | 162245.76 | 9.8962358 | 10.1064091 |
| 56 | 78729.39 | 127687.64 | 162185.49 | 9.8961369 | 10.1061489 |
| 55 | 78711.45 | 127611.16 | 162125.28 | 9.8960379 | 10.1058886 |
| 54 | 78693.50 | 127534.73 | 162065.13 | 9.8959389 | 10.1056285 |
| 53 | 78675.55 | 127458.36 | 162005.04 | 9.8958398 | 10.1053683 |
| 52 | 78657.59 | 127382.04 | 161945.00 | 9.8957406 | 10.1051082 |
| 51 | 78639.62 | 127305.78 | 161885.02 | 9.8956414 | 10.1048481 |
| 50 | 78621.65 | 127229.57 | 161825.10 | 9.8955422 | 10.1045881 |
| 49 | 78603.67 | 127153.42 | 161765.24 | 9.8954429 | 10.1043281 |
| 48 | 78585.69 | 127077.33 | 161705.44 | 9.8953435 | 10.1040681 |
| 47 | 78567.70 | 127001.30 | 161645.69 | 9.8952440 | 10.1038082 |
| 46 | 78549.70 | 126925.32 | 161586.00 | 9.8951445 | 10.1035483 |
| 45 | 78531.69 | 126849.39 | 161526.37 | 9.8950450 | 10.1032884 |
| 44 | 78513.68 | 126773.53 | 161466.80 | 9.8949453 | 10.1030286 |
| 43 | 78495.66 | 126697.72 | 161407.28 | 9.8948457 | 10.1027688 |
| 42 | 78477.64 | 126621.96 | 161347.83 | 9.8947459 | 10.1025090 |
| 41 | 78459.61 | 126546.26 | 161288.43 | 9.8946461 | 10.1022493 |
| 40 | 78441.57 | 126470.62 | 161229.08 | 9.8945463 | 10.1019896 |
| 39 | 78423.52 | 126395.03 | 161169.80 | 9.8944463 | 10.1017300 |
| 38 | 78405.47 | 126319.50 | 161110.57 | 9.8943464 | 10.1014704 |
| 37 | 78387.41 | 126244.02 | 161051.40 | 9.8942463 | 10.1012108 |
| 36 | 78369.35 | 126168.60 | 160992.28 | 9.8941462 | 10.1009513 |
| 35 | 78351.28 | 126093.23 | 160933.23 | 9.8940461 | 10.1006918 |
| 34 | 78333.20 | 126017.92 | 160874.23 | 9.8939458 | 10.1004323 |
| 33 | 78315.11 | 125942.67 | 160815.28 | 9.8938456 | 10.1001729 |
| 32 | 78297.02 | 125867.47 | 160756.40 | 9.8937452 | 10.0999135 |
| 31 | 78278.92 | 125792.32 | 160697.57 | 9.8936448 | 10.0996541 |
| 30 | 78260.82 | 125717.23 | 160638.79 | 9.8935444 | 10.0993948 |

# 38 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 62251.46 | 79543.59 | 127777.87 | 9.7941496 | 9.9006052 |
| 31 | 62274.22 | 79591.10 | 127807.45 | 9.7943083 | 9.9008645 |
| 32 | 62296.98 | 79638.62 | 127837.05 | 9.7944670 | 9.9011237 |
| 33 | 62319.73 | 79686.17 | 127866.67 | 9.7946256 | 9.9013830 |
| 34 | 62342.48 | 79733.74 | 127896.32 | 9.7947841 | 9.9016422 |
| 35 | 62365.22 | 79781.34 | 127926.00 | 9.7949425 | 9.9019013 |
| 36 | 62387.96 | 79828.95 | 127955.70 | 9.7951008 | 9.9021604 |
| 37 | 62410.69 | 79876.59 | 127985.43 | 9.7952590 | 9.9024195 |
| 38 | 62433.42 | 79924.25 | 128015.18 | 9.7954171 | 9.9026786 |
| 39 | 62456.14 | 79971.93 | 128044.95 | 9.7955751 | 9.9029376 |
| 40 | 62478.85 | 80019.63 | 128074.75 | 9.7957330 | 9.9031966 |
| 41 | 62501.56 | 80067.36 | 128104.57 | 9.7958909 | 9.9034555 |
| 42 | 62524.26 | 80115.11 | 128134.42 | 9.7960486 | 9.9037144 |
| 43 | 62546.96 | 80162.88 | 128164.30 | 9.7962062 | 9.9039733 |
| 44 | 62569.66 | 80210.67 | 128194.20 | 9.7963638 | 9.9042321 |
| 45 | 62592.35 | 80258.48 | 128224.12 | 9.7965212 | 9.9044910 |
| 46 | 62615.03 | 80306.32 | 128254.07 | 9.7966786 | 9.9047497 |
| 47 | 62637.71 | 80354.18 | 128284.04 | 9.7968359 | 9.9050085 |
| 48 | 62660.38 | 80402.06 | 128314.04 | 9.7969930 | 9.9052672 |
| 49 | 62683.05 | 80449.97 | 128344.06 | 9.7971501 | 9.9055259 |
| 50 | 62705.71 | 80497.90 | 128374.11 | 9.7973071 | 9.9057845 |
| 51 | 62728.37 | 80545.85 | 128404.18 | 9.7974640 | 9.9060431 |
| 52 | 62751.02 | 80593.82 | 128434.28 | 9.7976208 | 9.9063017 |
| 53 | 62773.66 | 80641.81 | 128464.40 | 9.7977775 | 9.9065603 |
| 54 | 62796.30 | 80689.83 | 128494.55 | 9.7979341 | 9.9068188 |
| 55 | 62818.94 | 80737.87 | 128524.72 | 9.7980906 | 9.9070773 |
| 56 | 62841.57 | 80785.93 | 128554.92 | 9.7982470 | 9.9073357 |
| 57 | 62864.20 | 80834.01 | 128585.14 | 9.7984034 | 9.9075941 |
| 58 | 62886.82 | 80882.12 | 128615.39 | 9.7985596 | 9.9078525 |
| 59 | 62909.43 | 80930.25 | 128645.66 | 9.7987158 | 9.9081109 |
| 60 | 62932.04 | 80978.40 | 128675.96 | 9.7988718 | 9.9083692 |

# 51 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 78260.82 | 125717.23 | 160638.79 | 9.8935444 | 10.0993948 |
| 29 | 78242.71 | 125642.19 | 160580.08 | 9.8934439 | 10.0991355 |
| 28 | 78224.59 | 125567.21 | 160521.42 | 9.8933433 | 10.0988763 |
| 27 | 78206.46 | 125492.29 | 160462.81 | 9.8932426 | 10.0986170 |
| 26 | 78188.33 | 125417.42 | 160404.25 | 9.8931419 | 10.0983578 |
| 25 | 78170.19 | 125342.60 | 160345.77 | 9.8930412 | 10.0980987 |
| 24 | 78152.05 | 125267.84 | 160287.34 | 9.8929404 | 10.0978396 |
| 23 | 78133.90 | 125193.13 | 160228.96 | 9.8928395 | 10.0975805 |
| 22 | 78115.74 | 125118.48 | 160170.64 | 9.8927385 | 10.0973214 |
| 21 | 78097.57 | 125043.88 | 160112.37 | 9.8926375 | 10.0970624 |
| 20 | 78079.40 | 124969.33 | 160054.16 | 9.8925365 | 10.0968034 |
| 19 | 78061.22 | 124894.84 | 159996.00 | 9.8924354 | 10.0965445 |
| 18 | 78043.04 | 124820.40 | 159937.90 | 9.8923342 | 10.0962856 |
| 17 | 78024.85 | 124746.02 | 159879.86 | 9.8922329 | 10.0960267 |
| 16 | 78006.65 | 124671.69 | 159821.87 | 9.8921316 | 10.0957679 |
| 15 | 77988.45 | 124597.42 | 159763.94 | 9.8920303 | 10.0955090 |
| 14 | 77970.24 | 124523.20 | 159706.06 | 9.8919289 | 10.0952503 |
| 13 | 77952.02 | 124449.03 | 159648.24 | 9.8918274 | 10.0949915 |
| 12 | 77933.80 | 124374.92 | 159590.47 | 9.8917258 | 10.0947328 |
| 11 | 77915.57 | 124300.86 | 159532.76 | 9.8916242 | 10.0944741 |
| 10 | 77897.33 | 124226.85 | 159475.11 | 9.8915226 | 10.0942155 |
| 9 | 77879.08 | 124152.90 | 159417.51 | 9.8914208 | 10.0939569 |
| 8 | 77860.83 | 124079.00 | 159359.96 | 9.8913191 | 10.0936983 |
| 7 | 77842.57 | 124005.15 | 159302.47 | 9.8912172 | 10.0934397 |
| 6 | 77824.31 | 123931.36 | 159245.04 | 9.8911153 | 10.0931812 |
| 5 | 77806.04 | 123857.62 | 159187.66 | 9.8910133 | 10.0929227 |
| 4 | 77787.77 | 123783.93 | 159130.33 | 9.8909113 | 10.0926643 |
| 3 | 77769.49 | 123710.30 | 159073.06 | 9.8908092 | 10.0924059 |
| 2 | 77751.20 | 123636.72 | 159015.84 | 9.8907071 | 10.0921475 |
| 1 | 77732.90 | 123563.19 | 158958.68 | 9.8906049 | 10.0918891 |
| 0 | 77714.60 | 123489.72 | 158901.57 | 9.8905026 | 10.0916308 |

# 39 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 62932.04 | 80978.40 | 128675.96 | 9.7988718 | 9.9083692 |
| 1 | 62954.64 | 81026.58 | 128706.28 | 9.7990278 | 9.9086275 |
| 2 | 62977.24 | 81074.78 | 128736.63 | 9.7991836 | 9.9088858 |
| 3 | 62999.83 | 81123.00 | 128767.00 | 9.7993394 | 9.9091440 |
| 4 | 63022.42 | 81171.24 | 128797.40 | 9.7994951 | 9.9094022 |
| 5 | 63045.00 | 81219.51 | 128827.82 | 9.7996507 | 9.9096603 |
| 6 | 63067.58 | 81267.80 | 128858.27 | 9.7998062 | 9.9099185 |
| 7 | 63090.15 | 81316.11 | 128888.75 | 9.7999616 | 9.9101766 |
| 8 | 63112.72 | 81364.44 | 128919.25 | 9.8001169 | 9.9104347 |
| 9 | 63135.28 | 81412.80 | 128949.77 | 9.8002721 | 9.9106927 |
| 10 | 63157.84 | 81461.18 | 128980.32 | 9.8004272 | 9.9109507 |
| 11 | 63180.39 | 81509.58 | 129010.90 | 9.8005823 | 9.9112087 |
| 12 | 63202.93 | 81558.01 | 129041.50 | 9.8007372 | 9.9114666 |
| 13 | 63225.47 | 81606.46 | 129072.13 | 9.8008921 | 9.9117245 |
| 14 | 63248.00 | 81654.93 | 129102.78 | 9.8010468 | 9.9119824 |
| 15 | 63270.53 | 81703.43 | 129133.46 | 9.8012015 | 9.9122403 |
| 16 | 63293.05 | 81751.95 | 129164.16 | 9.8013561 | 9.9124981 |
| 17 | 63315.57 | 81800.49 | 129194.89 | 9.8015106 | 9.9127559 |
| 18 | 63338.08 | 81849.05 | 129225.64 | 9.8016649 | 9.9130137 |
| 19 | 63360.59 | 81897.64 | 129256.42 | 9.8018192 | 9.9132714 |
| 20 | 63383.09 | 81946.25 | 129287.23 | 9.8019735 | 9.9135291 |
| 21 | 63405.59 | 81994.88 | 129318.06 | 9.8021276 | 9.9137868 |
| 22 | 63428.08 | 82043.54 | 129348.92 | 9.8022816 | 9.9140444 |
| 23 | 63450.57 | 82092.22 | 129379.80 | 9.8024355 | 9.9143020 |
| 24 | 63473.05 | 82140.93 | 129410.71 | 9.8025894 | 9.9145596 |
| 25 | 63495.53 | 82189.65 | 129441.64 | 9.8027431 | 9.9148171 |
| 26 | 63518.00 | 82238.40 | 129472.60 | 9.8028968 | 9.9150747 |
| 27 | 63540.46 | 82287.18 | 129503.59 | 9.8030504 | 9.9153322 |
| 28 | 63562.92 | 82335.97 | 129534.60 | 9.8032038 | 9.9155806 |
| 29 | 63585.37 | 82384.79 | 129565.64 | 9.8033572 | 9.9158471 |
| 30 | 63607.82 | 82433.64 | 129596.70 | 9.8035105 | 9.9161045 |

# 50 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 77714.60 | 123489.72 | 158901.57 | 9.8905026 | 10.0916308 |
| 59 | 77696.29 | 123416.29 | 158844.52 | 9.8904003 | 10.0913725 |
| 58 | 77677.97 | 123342.92 | 158787.52 | 9.8902979 | 10.0911142 |
| 57 | 77659.65 | 123269.61 | 158730.58 | 9.8901954 | 10.0908560 |
| 56 | 77641.32 | 123196.34 | 158673.69 | 9.8900929 | 10.0905978 |
| 55 | 77622.98 | 123123.13 | 158616.85 | 9.8899903 | 10.0903397 |
| 54 | 77604.64 | 123049.97 | 158560.07 | 9.8898877 | 10.0900815 |
| 53 | 77586.29 | 122976.87 | 158503.34 | 9.8897850 | 10.0898234 |
| 52 | 77567.94 | 122903.81 | 158446.67 | 9.8896822 | 10.0895653 |
| 51 | 77549.58 | 122830.81 | 158390.05 | 9.8895794 | 10.0893073 |
| 50 | 77531.21 | 122757.86 | 158333.48 | 9.8894765 | 10.0890493 |
| 49 | 77512.83 | 122684.96 | 158276.97 | 9.8893736 | 10.0887913 |
| 48 | 77494.45 | 122612.11 | 158220.51 | 9.8892706 | 10.0885334 |
| 47 | 77476.06 | 122539.32 | 158164.11 | 9.8891675 | 10.0882755 |
| 46 | 77457.67 | 122466.58 | 158107.76 | 9.8890644 | 10.0880176 |
| 45 | 77439.27 | 122393.89 | 158051.46 | 9.8889612 | 10.0877597 |
| 44 | 77420.86 | 122321.25 | 157995.21 | 9.8888580 | 10.0875019 |
| 43 | 77402.44 | 122248.66 | 157939.02 | 9.8887547 | 10.0872441 |
| 42 | 77384.02 | 122176.13 | 157882.89 | 9.8886513 | 10.0869863 |
| 41 | 77365.59 | 122103.64 | 157826.80 | 9.8885479 | 10.0867286 |
| 40 | 77347.16 | 122031.21 | 157770.77 | 9.8884444 | 10.0864709 |
| 39 | 77328.72 | 121958.83 | 157714.79 | 9.8883408 | 10.0862132 |
| 38 | 77310.27 | 121886.50 | 157658.87 | 9.8882372 | 10.0859556 |
| 37 | 77291.82 | 121814.22 | 157603.00 | 9.8881335 | 10.0856980 |
| 36 | 77273.36 | 121741.99 | 157547.18 | 9.8880298 | 10.0854404 |
| 35 | 77254.89 | 121669.82 | 157491.41 | 9.8879260 | 10.0851829 |
| 34 | 77236.42 | 121597.69 | 157435.70 | 9.8878221 | 10.0849253 |
| 33 | 77217.94 | 121525.62 | 157380.04 | 9.8877182 | 10.0846678 |
| 32 | 77199.45 | 121453.59 | 157324.43 | 9.8876142 | 10.0844104 |
| 31 | 77180.96 | 121381.62 | 157268.87 | 9.8875102 | 10.0841529 |
| 30 | 77162.46 | 121309.70 | 157213.37 | 9.8874061 | 10.0838955 |

# 39 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan* |
|---|---|---|---|---|---|
| 30 | 63607.82 | 82433.64 | 129596.70 | 9.8035105 | 9.9161045 |
| 31 | 63630.26 | 82482.51 | 129627.79 | 9.8036637 | 9.9163618 |
| 32 | 63652.70 | 82531.40 | 129658.90 | 9.8038168 | 9.9166192 |
| 33 | 63675.13 | 82580.31 | 129690.04 | 9.8039699 | 9.9168765 |
| 34 | 63697.56 | 82629.25 | 129721.21 | 9.8041228 | 9.9171338 |
| 35 | 63719.98 | 82678.21 | 129752.40 | 9.8042757 | 9.9173911 |
| 36 | 63742.40 | 82727.19 | 129783.62 | 9.8044284 | 9.9176483 |
| 37 | 63764.81 | 82776.20 | 129814.87 | 9.8045811 | 9.9179055 |
| 38 | 63787.21 | 82825.23 | 129846.14 | 9.8047336 | 9.9181627 |
| 39 | 63809.61 | 82874.29 | 129877.44 | 9.8048861 | 9.9184198 |
| 40 | 63832.01 | 82923.37 | 129908.76 | 9.8050385 | 9.9186769 |
| 41 | 63854.40 | 82972.47 | 129940.11 | 9.8051908 | 9.9189340 |
| 42 | 63876.78 | 83021.60 | 129971.48 | 9.8053430 | 9.9191911 |
| 43 | 63899.16 | 83070.75 | 130002.88 | 9.8054951 | 9.9194481 |
| 44 | 63921.53 | 83119.92 | 130034.31 | 9.8056472 | 9.9197051 |
| 45 | 63943.90 | 83169.12 | 130065.76 | 9.8057991 | 9.9199621 |
| 46 | 63966.26 | 83218.34 | 130097.24 | 9.8059510 | 9.9202191 |
| 47 | 63988.62 | 83267.59 | 130128.75 | 9.8061027 | 9.9204760 |
| 48 | 64010.97 | 83316.86 | 130160.28 | 9.8062544 | 9.9207329 |
| 49 | 64033.32 | 83366.15 | 130191.84 | 9.8064060 | 9.9209898 |
| 50 | 64055.66 | 83415.47 | 130223.43 | 9.8065575 | 9.9212466 |
| 51 | 64077.99 | 83464.81 | 130255.04 | 9.8067089 | 9.9215034 |
| 52 | 64100.32 | 83514.18 | 130286.68 | 9.8068602 | 9.9217602 |
| 53 | 64122.64 | 83563.57 | 130318.34 | 9.8070114 | 9.9220170 |
| 54 | 64144.96 | 83612.98 | 130350.03 | 9.8071626 | 9.9222737 |
| 55 | 64167.27 | 83662.42 | 130381.75 | 9.8073136 | 9.9225304 |
| 56 | 64189.58 | 83711.88 | 130413.49 | 9.8074646 | 9.9227871 |
| 57 | 64211.88 | 83761.36 | 130445.26 | 9.8076154 | 9.9230437 |
| 58 | 64234.18 | 83810.87 | 130477.06 | 9.8077662 | 9.9233004 |
| 59 | 64256.47 | 83860.40 | 130508.88 | 9.8079169 | 9.9235570 |
| 60 | 64278.76 | 83909.96 | 130540.73 | 9.8080675 | 9.9238135 |

# 50 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan.* |
|---|---|---|---|---|---|
| 30 | 77162.46 | 121309.70 | 157213.37 | 9.8874061 | 10.0838955 |
| 29 | 77143.95 | 121237.83 | 157157.92 | 9.8873019 | 10.0836382 |
| 28 | 77125.44 | 121166.01 | 157102.52 | 9.8871977 | 10.0833808 |
| 27 | 77106.92 | 121094.24 | 157047.17 | 9.8870934 | 10.0831235 |
| 26 | 77088.39 | 121022.52 | 156991.88 | 9.8869890 | 10.0828662 |
| 25 | 77069.86 | 120950.85 | 156936.64 | 9.8868846 | 10.0826089 |
| 24 | 77051.32 | 120879.23 | 156881.45 | 9.8867801 | 10.0823517 |
| 23 | 77032.78 | 120807.67 | 156826.31 | 9.8866756 | 10.0820945 |
| 22 | 77014.23 | 120736.15 | 156771.23 | 9.8865710 | 10.0818373 |
| 21 | 76995.67 | 120664.68 | 156716.19 | 9.8864663 | 10.0815802 |
| 20 | 76977.10 | 120593.27 | 156661.21 | 9.8863616 | 10.0813231 |
| 19 | 76958.53 | 120521.90 | 156606.28 | 9.8862568 | 10.0810660 |
| 18 | 76939.95 | 120450.58 | 156551.41 | 9.8861519 | 10.0808089 |
| 17 | 76921.37 | 120379.31 | 156496.58 | 9.8860470 | 10.0805519 |
| 16 | 76902.78 | 120308.10 | 156441.81 | 9.8859420 | 10.0802949 |
| 15 | 76884.18 | 120236.93 | 156387.08 | 9.8858370 | 10.0800379 |
| 14 | 76865.58 | 120165.81 | 156332.41 | 9.8857319 | 10.0797809 |
| 13 | 76846.97 | 120094.75 | 156277.79 | 9.8856267 | 10.0795240 |
| 12 | 76828.35 | 120023.73 | 156223.22 | 9.8855215 | 10.0792671 |
| 11 | 76809.73 | 119952.76 | 156168.70 | 9.8854162 | 10.0790102 |
| 10 | 76791.10 | 119881.84 | 156114.24 | 9.8853109 | 10.0787534 |
| 9 | 76772.46 | 119810.97 | 156059.82 | 9.8852055 | 10.0784966 |
| 8 | 76753.82 | 119740.15 | 156005.46 | 9.8851000 | 10.0782398 |
| 7 | 76735.17 | 119669.38 | 155951.15 | 9.8849945 | 10.0779830 |
| 6 | 76716.51 | 119598.66 | 155896.89 | 9.8848889 | 10.0777263 |
| 5 | 76697.85 | 119527.99 | 155842.67 | 9.8847832 | 10.0774696 |
| 4 | 76679.18 | 119457.36 | 155788.51 | 9.8846775 | 10.0772129 |
| 3 | 76660.51 | 119386.79 | 155734.41 | 9.8845717 | 10.0769563 |
| 2 | 76641.83 | 119316.26 | 155680.35 | 9.8844659 | 10.0766996 |
| 1 | 76623.14 | 119245.79 | 155626.34 | 9.8843599 | 10.0764430 |
| 0 | 76604.44 | 119175.36 | 155572.38 | 9.8842540 | 10.0761865 |

| Minu. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 64278.76 | 83909.96 | 130540.73 | 9.8080675 | 9.9238135 |
| 1 | 64301.04 | 83959.54 | 130572.61 | 9.8082180 | 9.9240701 |
| 2 | 64323.32 | 84009.15 | 130604.51 | 9.8083684 | 9.9243266 |
| 3 | 64345.59 | 84058.78 | 130636.44 | 9.8085188 | 9.9245831 |
| 4 | 64367.85 | 84108.44 | 130668.39 | 9.8086690 | 9.9248396 |
| 5 | 64390.11 | 84158.12 | 130700.37 | 9.8088192 | 9.9250960 |
| 6 | 64412.36 | 84207.82 | 130732.38 | 9.8089692 | 9.9253524 |
| 7 | 64434.61 | 84257.55 | 130764.42 | 9.8091192 | 9.9256088 |
| 8 | 64456.85 | 84307.30 | 130796.49 | 9.8092691 | 9.9258652 |
| 9 | 64479.09 | 84357.08 | 130828.58 | 9.8094189 | 9.9261215 |
| 10 | 64501.32 | 84406.88 | 130860.70 | 9.8095686 | 9.9263778 |
| 11 | 64523.55 | 84456.70 | 130892.84 | 9.8097182 | 9.9266341 |
| 12 | 64545.77 | 84506.55 | 130925.01 | 9.8098678 | 9.9268904 |
| 13 | 64567.98 | 84556.43 | 130957.21 | 9.8100172 | 9.9271466 |
| 14 | 64590.19 | 84606.33 | 130989.43 | 9.8101666 | 9.9274028 |
| 15 | 64612.40 | 84656.25 | 131021.68 | 9.8103159 | 9.9276590 |
| 16 | 64634.60 | 84706.20 | 131053.96 | 9.8104650 | 9.9279152 |
| 17 | 64656.79 | 84756.17 | 131086.26 | 9.8106141 | 9.9281713 |
| 18 | 64678.98 | 84806.17 | 131118.59 | 9.8107631 | 9.9284274 |
| 19 | 64701.16 | 84856.19 | 131150.95 | 9.8109121 | 9.9286835 |
| 20 | 64723.34 | 84906.24 | 131183.34 | 9.8110609 | 9.9289396 |
| 21 | 64745.51 | 84956.31 | 131215.75 | 9.8112096 | 9.9291956 |
| 22 | 64767.67 | 85006.40 | 131248.19 | 9.8113583 | 9.9294516 |
| 23 | 64789.83 | 85056.52 | 131280.66 | 9.8115069 | 9.9297076 |
| 24 | 64811.99 | 85106.67 | 131313.16 | 9.8116554 | 9.9299636 |
| 25 | 64834.14 | 85156.84 | 131345.68 | 9.8118038 | 9.9302195 |
| 26 | 64856.28 | 85207.04 | 131378.23 | 9.8119521 | 9.9304755 |
| 27 | 64878.42 | 85257.26 | 131410.81 | 9.8121003 | 9.9307314 |
| 28 | 64900.55 | 85307.50 | 131443.41 | 9.8122484 | 9.9309872 |
| 29 | 64922.68 | 85357.77 | 131476.04 | 9.8123965 | 9.9312431 |
| 30 | 64944.80 | 85408.07 | 131508.70 | 9.8125444 | 9.9314989 |

## 49 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 76604.44 | 119175.36 | 155572.38 | 9.8842540 | 10.0761865 |
| 59 | 76585.74 | 119104.98 | 155518.48 | 9.8841479 | 10.0759299 |
| 58 | 76567.03 | 119034.65 | 155464.62 | 9.8840418 | 10.0756734 |
| 57 | 76548.32 | 118964.37 | 155410.81 | 9.8839357 | 10.0754169 |
| 56 | 76529.60 | 118894.14 | 155357.06 | 9.8838294 | 10.0751604 |
| 55 | 76510.87 | 118823.95 | 155303.35 | 9.8837232 | 10.0749040 |
| 54 | 76492.14 | 118753.82 | 155249.70 | 9.8836168 | 10.0746476 |
| 53 | 76473.40 | 118683.73 | 155196.09 | 9.8835104 | 10.0743912 |
| 52 | 76454.65 | 118613.69 | 155142.54 | 9.8834039 | 10.0741348 |
| 51 | 76435.90 | 118543.70 | 155089.04 | 9.8832974 | 10.0738785 |
| 50 | 76417.14 | 118473.76 | 155035.58 | 9.8831908 | 10.0736222 |
| 49 | 76398.37 | 118403.87 | 154982.18 | 9.8830841 | 10.0733659 |
| 48 | 76379.60 | 118334.02 | 154928.82 | 9.8829774 | 10.0731096 |
| 47 | 76360.82 | 118264.22 | 154875.52 | 9.8828706 | 10.0728534 |
| 46 | 76342.04 | 118194.47 | 154822.26 | 9.8827638 | 10.0725972 |
| 45 | 76323.25 | 118124.77 | 154769.06 | 9.8826568 | 10.0723410 |
| 44 | 76304.45 | 118055.12 | 154715.90 | 9.8825499 | 10.0720848 |
| 43 | 76285.64 | 117985.51 | 154662.80 | 9.8824428 | 10.0718287 |
| 42 | 76266.83 | 117915.95 | 154609.74 | 9.8823357 | 10.0715726 |
| 41 | 76248.01 | 117846.44 | 154556.73 | 9.8822285 | 10.0713165 |
| 40 | 76229.19 | 117776.98 | 154503.78 | 9.8821213 | 10.0710604 |
| 39 | 76210.36 | 117707.56 | 154450.87 | 9.8820140 | 10.0708044 |
| 38 | 76191.52 | 117638.20 | 154398.01 | 9.8819067 | 10.0705484 |
| 37 | 76172.68 | 117568.88 | 154345.20 | 9.8817992 | 10.0702924 |
| 36 | 76153.83 | 117499.60 | 154292.44 | 9.8816918 | 10.0700364 |
| 35 | 76134.97 | 117430.38 | 154239.73 | 9.8815842 | 10.0697805 |
| 34 | 76116.11 | 117361.20 | 154187.06 | 9.8814766 | 10.0695245 |
| 33 | 76097.24 | 117292.07 | 154134.45 | 9.8813689 | 10.0692686 |
| 32 | 76078.37 | 117222.98 | 154081.89 | 9.8812612 | 10.0690128 |
| 31 | 76059.49 | 117153.95 | 154029.37 | 9.8811534 | 10.0687569 |
| 30 | 76040.60 | 117084.96 | 153976.90 | 9.8810455 | 10.0685011 |

## 40 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 64944.80 | 85408.07 | 131508.70 | 9.8125444 | 9.9314989 |
| 31 | 64966.92 | 85458.39 | 131541.39 | 9.8126923 | 9.9317547 |
| 32 | 64989.03 | 85508.73 | 131574.10 | 9.8128401 | 9.9320105 |
| 33 | 65011.14 | 85559.10 | 131606.84 | 9.8129878 | 9.9322662 |
| 34 | 65033.24 | 85609.50 | 131639.61 | 9.8131354 | 9.9325220 |
| 35 | 65055.33 | 85659.92 | 131672.41 | 9.8132829 | 9.9327777 |
| 36 | 65077.42 | 85710.37 | 131705.23 | 9.8134303 | 9.9330334 |
| 37 | 65099.50 | 85760.84 | 131738.08 | 9.8135777 | 9.9332890 |
| 38 | 65121.58 | 85811.33 | 131770.96 | 9.8137250 | 9.9335446 |
| 39 | 65143.66 | 85861.85 | 131803.86 | 9.8138721 | 9.9338003 |
| 40 | 65165.72 | 85912.40 | 131836.79 | 9.8140192 | 9.9340559 |
| 41 | 65187.78 | 85962.97 | 131869.75 | 9.8141662 | 9.9343114 |
| 42 | 65209.84 | 86013.57 | 131902.74 | 9.8143131 | 9.9345670 |
| 43 | 65231.89 | 86064.19 | 131935.76 | 9.8144600 | 9.9348225 |
| 44 | 65253.94 | 86114.84 | 131968.81 | 9.8146067 | 9.9350780 |
| 45 | 65275.98 | 86165.51 | 132001.88 | 9.8147534 | 9.9353335 |
| 46 | 65298.01 | 86216.21 | 132034.98 | 9.8148999 | 9.9355889 |
| 47 | 65320.04 | 86266.93 | 132068.11 | 9.8150464 | 9.9358444 |
| 48 | 65342.06 | 86317.68 | 132101.26 | 9.8151928 | 9.9360998 |
| 49 | 65364.08 | 86368.46 | 132134.44 | 9.8153391 | 9.9363552 |
| 50 | 65386.09 | 86419.26 | 132167.65 | 9.8154854 | 9.9366105 |
| 51 | 65408.10 | 86470.09 | 132200.89 | 9.8156315 | 9.9368659 |
| 52 | 65430.10 | 86520.94 | 132234.16 | 9.8157776 | 9.9371212 |
| 53 | 65452.09 | 86571.81 | 132267.45 | 9.8159235 | 9.9373765 |
| 54 | 65474.08 | 86622.71 | 132300.77 | 9.8160694 | 9.9376318 |
| 55 | 65496.06 | 86673.64 | 132334.12 | 9.8162152 | 9.9378871 |
| 56 | 65518.04 | 86724.60 | 132367.50 | 9.8163609 | 9.9381423 |
| 57 | 65540.01 | 86775.58 | 132400.91 | 9.8165066 | 9.9383975 |
| 58 | 65561.98 | 86826.59 | 132434.35 | 9.8166521 | 9.9386527 |
| 59 | 65583.94 | 86877.62 | 132467.81 | 9.8167975 | 9.9389079 |
| 60 | 65605.90 | 86928.68 | 132501.30 | 9.8169429 | 9.9391631 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 76040.60 | 117084.96 | 153976.90 | 9.8810455 | 10.0685011 |
| 29 | 76021.70 | 117016.01 | 153924.49 | 9.8809376 | 10.0682453 |
| 28 | 76002.80 | 116947.12 | 153872.12 | 9.8808296 | 10.0679895 |
| 27 | 75983.89 | 116878.27 | 153819.80 | 9.8807215 | 10.0677338 |
| 26 | 75964.98 | 116809.47 | 153767.52 | 9.8806134 | 10.0674780 |
| 25 | 75946.06 | 116740.71 | 153715.30 | 9.8805052 | 10.0672223 |
| 24 | 75927.13 | 116672.00 | 153663.12 | 9.8803970 | 10.0669666 |
| 23 | 75908.20 | 116603.34 | 153611.00 | 9.8802887 | 10.0667110 |
| 22 | 75889.26 | 116534.72 | 153558.92 | 9.8801803 | 10.0664554 |
| 21 | 75870.31 | 116466.15 | 153506.89 | 9.8800719 | 10.0661997 |
| 20 | 75851.36 | 116397.63 | 153454.91 | 9.8799634 | 10.0659441 |
| 19 | 75832.40 | 116329.16 | 153402.97 | 9.8798548 | 10.0656886 |
| 18 | 75813.43 | 116260.73 | 153351.09 | 9.8797462 | 10.0654330 |
| 17 | 75794.46 | 116192.34 | 153299.25 | 9.8796375 | 10.0651775 |
| 16 | 75775.48 | 116124.00 | 153247.46 | 9.8795287 | 10.0649220 |
| 15 | 75756.50 | 116055.71 | 153195.72 | 9.8794199 | 10.0646665 |
| 14 | 75737.51 | 115987.47 | 153144.03 | 9.8793110 | 10.0644111 |
| 13 | 75718.51 | 115919.27 | 153092.38 | 9.8792021 | 10.0641556 |
| 12 | 75699.50 | 115851.11 | 153040.78 | 9.8790930 | 10.0639002 |
| 11 | 75680.49 | 115783.01 | 152989.23 | 9.8789840 | 10.0636448 |
| 10 | 75661.47 | 115714.95 | 152937.73 | 9.9788748 | 10.0633895 |
| 9 | 75642.45 | 115646.93 | 152886.27 | 9.8787656 | 10.0631341 |
| 8 | 75623.42 | 115578.96 | 152834.87 | 9.8786563 | 10.0628788 |
| 7 | 75604.39 | 115511.04 | 152783.51 | 9.8785470 | 10.0626235 |
| 6 | 75585.35 | 115443.16 | 152732.19 | 9.8784376 | 10.0623682 |
| 5 | 75566.30 | 115375.32 | 152680.93 | 9.8783281 | 10.0621129 |
| 4 | 75547.24 | 115307.54 | 152629.71 | 9.8782186 | 10.0618577 |
| 3 | 75528.18 | 115239.79 | 152578.54 | 9.8781090 | 10.0616025 |
| 2 | 75509.11 | 115172.10 | 152527.41 | 9.8779994 | 10.0613473 |
| 1 | 75490.04 | 115104.45 | 152476.34 | 9.8778896 | 10.0610921 |
| 0 | 75470.96 | 115036.84 | 152425.31 | 9.8777799 | 10.0608369 |

# 41 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 65605.90 | 86928.68 | 132501.30 | 9.8169429 | 9.9391631 |
| 1 | 65627.85 | 86979.76 | 132534.82 | 9.8170882 | 9.9394182 |
| 2 | 65649.80 | 87030.87 | 132568.37 | 9.8172334 | 9.9396733 |
| 3 | 65671.74 | 87082.00 | 132601.94 | 9.8173785 | 9.9399284 |
| 4 | 65693.67 | 87133.16 | 132635.54 | 9.8175235 | 9.9401835 |
| 5 | 65715.60 | 87184.35 | 132669.18 | 9.8176685 | 9.9404385 |
| 6 | 65737.52 | 87235.56 | 132702.84 | 9.8178133 | 9.9406936 |
| 7 | 65759.44 | 87286.80 | 132736.53 | 9.8179581 | 9.9409486 |
| 8 | 65781.35 | 87338.06 | 132770.25 | 9.8181028 | 9.9412036 |
| 9 | 65803.26 | 87389.35 | 132803.99 | 9.8182474 | 9.9414585 |
| 10 | 65825.16 | 87440.67 | 132837.76 | 9.8183919 | 9.9417135 |
| 11 | 65847.06 | 87492.01 | 132871.56 | 9.8185364 | 9.9419684 |
| 12 | 65868.95 | 87543.38 | 132905.39 | 9.8186807 | 9.9422233 |
| 13 | 65890.83 | 87594.78 | 132939.25 | 9.8188250 | 9.9424782 |
| 14 | 65912.71 | 87646.20 | 132973.14 | 9.8189692 | 9.9427331 |
| 15 | 65934.58 | 87697.65 | 133007.06 | 9.8191133 | 9.9429879 |
| 16 | 65956.45 | 87749.12 | 133041.00 | 9.8192573 | 9.9432428 |
| 17 | 65978.31 | 87800.62 | 133074.97 | 9.8194012 | 9.9434976 |
| 18 | 66000.17 | 87852.15 | 133108.97 | 9.8195450 | 9.9437524 |
| 19 | 66022.02 | 87903.70 | 133143.00 | 9.8196888 | 9.9440072 |
| 20 | 66043.86 | 87955.28 | 133177.06 | 9.8198325 | 9.9442619 |
| 21 | 66065.70 | 88006.89 | 133211.15 | 9.8199761 | 9.9445166 |
| 22 | 66087.53 | 88058.52 | 133245.27 | 9.8201196 | 9.9447714 |
| 23 | 66109.36 | 88110.18 | 133279.42 | 9.8202630 | 9.9450261 |
| 24 | 66131.18 | 88161.86 | 133313.59 | 9.8204063 | 9.9452807 |
| 25 | 66153.00 | 88213.57 | 133347.79 | 9.8205496 | 9.9455354 |
| 26 | 66174.81 | 88265.31 | 133382.02 | 9.8206927 | 9.9457900 |
| 27 | 66196.62 | 88317.07 | 133416.28 | 9.8208358 | 9.9460447 |
| 28 | 66218.42 | 88368.86 | 133450.57 | 9.8209788 | 9.9462993 |
| 29 | 66240.22 | 88420.68 | 133484.89 | 9.8211217 | 9.9465539 |
| 30 | 66262.01 | 88472.53 | 133519.24 | 9.8212646 | 9.9468084 |

# 48 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 75470.96 | 115036.84 | 152425.31 | 9.8777799 | 10.0608369 |
| 59 | 75451.87 | 114969.28 | 152374.33 | 9.8776700 | 10.0605818 |
| 58 | 75432.78 | 114901.76 | 152323.39 | 9.8775601 | 10.0603267 |
| 57 | 75413.68 | 114834.29 | 152272.50 | 9.8774501 | 10.0600716 |
| 56 | 75394.57 | 114766.87 | 152221.66 | 9.8773401 | 10.0598165 |
| 55 | 75375.46 | 114699.49 | 152170.87 | 9.8772300 | 10.0595615 |
| 54 | 75356.34 | 114632.15 | 152120.12 | 9.8771198 | 10.0593064 |
| 53 | 75337.21 | 114564.86 | 152069.42 | 9.8770096 | 10.0590514 |
| 52 | 75318.08 | 114497.62 | 152018.76 | 9.8768993 | 10.0587964 |
| 51 | 75298.94 | 114430.41 | 151968.15 | 9.8767889 | 10.0585415 |
| 50 | 75279.80 | 114363.26 | 151917.59 | 9.8766785 | 10.0582865 |
| 49 | 75260.65 | 114296.15 | 151867.08 | 9.8765680 | 10.0580316 |
| 48 | 75241.49 | 114229.08 | 151816.61 | 9.8764574 | 10.0577767 |
| 47 | 75222.33 | 114162.06 | 151766.19 | 9.8763468 | 10.0575218 |
| 46 | 75203.16 | 114095.08 | 151715.81 | 9.8762361 | 10.0572669 |
| 45 | 75183.98 | 114028.15 | 151665.48 | 9.8761253 | 10.0570121 |
| 44 | 75164.80 | 113961.26 | 151615.20 | 9.8760145 | 10.0567572 |
| 43 | 75145.61 | 113894.41 | 151564.96 | 9.8759036 | 10.0565024 |
| 42 | 75126.41 | 113827.61 | 151514.77 | 9.8757927 | 10.0562476 |
| 41 | 75107.21 | 113760.85 | 151464.62 | 9.8756816 | 10.0559928 |
| 40 | 75088.00 | 113694.14 | 151414.52 | 9.8755706 | 10.0557381 |
| 39 | 75068.79 | 113627.47 | 151364.47 | 9.8754594 | 10.0554834 |
| 38 | 75049.57 | 113560.85 | 151314.46 | 9.8753482 | 10.0552286 |
| 37 | 75030.34 | 113494.27 | 151264.50 | 9.8752369 | 10.0549739 |
| 36 | 75011.11 | 113427.73 | 151214.59 | 9.8751256 | 10.0547193 |
| 35 | 74991.87 | 113361.24 | 151164.72 | 9.8750142 | 10.0544646 |
| 34 | 74972.62 | 113294.79 | 151114.89 | 9.8749027 | 10.0542100 |
| 33 | 74953.37 | 113228.39 | 151065.11 | 9.8747912 | 10.0539553 |
| 32 | 74934.11 | 113162.03 | 151015.38 | 9.8746795 | 10.0537007 |
| 31 | 74914.84 | 113095.71 | 150965.69 | 9.8745679 | 10.0534461 |
| 30 | 74895.57 | 113029.44 | 150916.05 | 9.8744561 | 10.0531916 |

# 41 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 66262.01 | 88472.53 | 133519.24 | 9.8212646 | 9.9468084 |
| 31 | 66283.79 | 88524.40 | 133553.62 | 9.8214073 | 9.9470630 |
| 32 | 66305.57 | 88576.30 | 133588.03 | 9.8215500 | 9.9473175 |
| 33 | 66327.34 | 88628.22 | 133622.46 | 9.8216926 | 9.9475720 |
| 34 | 66349.11 | 88680.17 | 133656.92 | 9.8218351 | 9.9478265 |
| 35 | 66370.87 | 88732.15 | 133691.41 | 9.8219775 | 9.9480810 |
| 36 | 66392.62 | 88784.16 | 133725.94 | 9.8221198 | 9.9483355 |
| 37 | 66414.37 | 88836.20 | 133760.49 | 9.8222621 | 9.9485899 |
| 38 | 66436.11 | 88888.26 | 133795.07 | 9.8224042 | 9.9488443 |
| 39 | 66457.85 | 88940.34 | 133829.68 | 9.8225463 | 9.9490987 |
| 40 | 66479.59 | 88992.45 | 133864.32 | 9.8226883 | 9.9493531 |
| 41 | 66501.32 | 89044.59 | 133898.99 | 9.8228302 | 9.9496075 |
| 42 | 66523.04 | 89096.75 | 133933.69 | 9.8229721 | 9.9498619 |
| 43 | 66544.75 | 89148.94 | 133968.42 | 9.8231138 | 9.9501162 |
| 44 | 66566.46 | 89201.16 | 134003.17 | 9.8232555 | 9.9503705 |
| 45 | 66588.17 | 89253.41 | 134037.95 | 9.8233971 | 9.9506248 |
| 46 | 66609.87 | 89305.69 | 134072.76 | 9.8235386 | 9.9508791 |
| 47 | 66631.56 | 89357.99 | 134107.61 | 9.8236800 | 9.9511334 |
| 48 | 66653.25 | 89410.32 | 134142.48 | 9.8238213 | 9.9513876 |
| 49 | 66674.93 | 89462.68 | 134177.38 | 9.8239626 | 9.9516419 |
| 50 | 66696.61 | 89515.06 | 134212.32 | 9.8241037 | 9.9518961 |
| 51 | 66718.28 | 89567.47 | 134247.28 | 9.8242448 | 9.9521503 |
| 52 | 66739.94 | 89619.91 | 134282.27 | 9.8243858 | 9.9524045 |
| 53 | 66761.60 | 89672.38 | 134317.29 | 9.8245267 | 9.9526587 |
| 54 | 66783.26 | 89724.87 | 134352.34 | 9.8246676 | 9.9529128 |
| 55 | 66804.91 | 89777.39 | 134387.42 | 9.8248083 | 9.9531670 |
| 56 | 66826.55 | 89829.94 | 134422.53 | 9.8249490 | 9.9534211 |
| 57 | 66848.18 | 89882.52 | 134457.67 | 9.8250896 | 9.9536752 |
| 58 | 66869.81 | 89935.12 | 134492.84 | 9.8252301 | 9.9539293 |
| 59 | 66891.44 | 89987.75 | 134528.04 | 9.9253705 | 9.9541834 |
| 60 | 66913.06 | 90040.41 | 134563.27 | 9.8255109 | 9.9544374 |

# 48 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 74895.57 | 113029.44 | 150916.05 | 9.8744561 | 10.0531916 |
| 29 | 74876.29 | 112963.21 | 150866.45 | 9.8743443 | 10.0529370 |
| 28 | 74857.01 | 112897.02 | 150816.90 | 9.8742325 | 10.0526825 |
| 27 | 74837.72 | 112830.88 | 150767.39 | 9.8741205 | 10.0524280 |
| 26 | 74818.42 | 112764.78 | 150717.93 | 9.8740085 | 10.0521735 |
| 25 | 74799.12 | 112698.72 | 150668.52 | 9.8738965 | 10.0519190 |
| 24 | 74779.81 | 112632.71 | 150619.15 | 9.8737844 | 10.0516645 |
| 23 | 74760.49 | 112566.74 | 150569.82 | 9.8736722 | 10.0514101 |
| 22 | 74741.17 | 112500.81 | 150520.54 | 9.8735599 | 10.0511557 |
| 21 | 74721.84 | 112434.93 | 150471.31 | 9.8734476 | 10.0509013 |
| 20 | 74702.51 | 112369.09 | 150422.11 | 9.8733352 | 10.0506469 |
| 19 | 74683.17 | 112303.29 | 150372.97 | 9.8732227 | 10.0503925 |
| 18 | 74663.82 | 112237.54 | 150323.87 | 9.8731102 | 10.0501381 |
| 17 | 74644.46 | 112171.83 | 150274.81 | 9.8729976 | 10.0498838 |
| 16 | 74625.10 | 112106.16 | 150225.80 | 9.8728849 | 10.0496295 |
| 15 | 74605.74 | 112040.53 | 150176.83 | 9.8727722 | 10.0493752 |
| 14 | 74586.37 | 111974.95 | 150127.91 | 9.8726594 | 10.0491209 |
| 13 | 74566.99 | 111909.41 | 150079.03 | 9.8725466 | 10.0488666 |
| 12 | 74547.60 | 111843.91 | 150030.20 | 9.8724337 | 10.0486124 |
| 11 | 74528.21 | 111778.46 | 149981.41 | 9.8723207 | 10.0483581 |
| 10 | 74508.81 | 111713.05 | 149932.67 | 9.8722076 | 10.0481039 |
| 9 | 74489.40 | 111647.68 | 149883.97 | 9.8720945 | 10.0478497 |
| 8 | 74469.99 | 111582.35 | 149835.31 | 9.8719813 | 10.0475955 |
| 7 | 74450.57 | 111517.06 | 149786.70 | 9.8718681 | 10.0473413 |
| 6 | 74431.15 | 111451.82 | 149738.13 | 9.8717548 | 10.0470872 |
| 5 | 74411.72 | 111386.62 | 149689.61 | 9.8716414 | 10.0468330 |
| 4 | 74392.29 | 111321.46 | 149641.13 | 9.8715279 | 10.0465789 |
| 3 | 74372.85 | 111256.35 | 149592.70 | 9.8714144 | 10.0463248 |
| 2 | 74353.40 | 111191.27 | 149544.30 | 9.8713008 | 10.0460707 |
| 1 | 74333.94 | 111126.24 | 149495.96 | 9.8711872 | 10.0458166 |
| 0 | 74314.48 | 111061.25 | 149447.65 | 9.8710735 | 10.0455626 |

# 42 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 66913.06 | 90040.41 | 134563.27 | 9.8255109 | 9.9544374 |
| 1 | 66934.67 | 90093.09 | 134598.53 | 9.8256512 | 9.9546915 |
| 2 | 66956.28 | 90145.80 | 134633.82 | 9.8257913 | 9.9549455 |
| 3 | 66977.88 | 90198.54 | 134669.14 | 9.8259314 | 9.9551995 |
| 4 | 66999.48 | 90251.31 | 134704.49 | 9.8260715 | 9.9554535 |
| 5 | 67021.07 | 90304.11 | 134739.87 | 9.8262114 | 9.9557075 |
| 6 | 67042.66 | 90356.94 | 134775.28 | 9.8263512 | 9.9559615 |
| 7 | 67064.24 | 90409.79 | 134810.72 | 9.8264910 | 9.9562154 |
| 8 | 67085.82 | 90462.67 | 134846.19 | 9.8266307 | 9.9564694 |
| 9 | 67107.39 | 90515.58 | 134881.69 | 9.8267703 | 9.9567233 |
| 10 | 67128.95 | 90568.51 | 134917.21 | 9.8269098 | 9.9569772 |
| 11 | 67150.51 | 90621.47 | 134952.77 | 9.8270493 | 9.9572311 |
| 12 | 67172.06 | 90674.46 | 134988.36 | 9.8271887 | 9.9574850 |
| 13 | 67193.61 | 90727.48 | 135023.98 | 9.8273279 | 9.9577389 |
| 14 | 67215.15 | 90780.53 | 135059.63 | 9.8274671 | 9.9579927 |
| 15 | 67236.68 | 90833.60 | 135095.31 | 9.8276063 | 9.9582465 |
| 16 | 67258.21 | 90886.71 | 135131.02 | 9.8277453 | 9.9585004 |
| 17 | 67279.73 | 90939.84 | 135166.76 | 9.8278843 | 9.9587542 |
| 18 | 67301.25 | 90993.00 | 135202.54 | 9.8280231 | 9.9590080 |
| 19 | 67322.76 | 91046.19 | 135238.34 | 9.8281619 | 9.9592618 |
| 20 | 67344.27 | 91099.41 | 135274.17 | 9.8283006 | 9.9595155 |
| 21 | 67365.77 | 91152.65 | 135310.03 | 9.8284393 | 9.9597693 |
| 22 | 67387.27 | 91205.92 | 135345.93 | 9.8285778 | 9.9600230 |
| 23 | 67408.76 | 91259.22 | 135381.86 | 9.8287163 | 9.9602767 |
| 24 | 67430.24 | 91312.55 | 135417.81 | 9.8288547 | 9.9605305 |
| 25 | 67451.72 | 91365.91 | 135453.79 | 9.8289930 | 9.9607842 |
| 26 | 67473.19 | 91419.29 | 135489.80 | 9.8291312 | 9.9610378 |
| 27 | 67494.66 | 91472.70 | 135525.85 | 9.8292694 | 9.9612915 |
| 28 | 67516.12 | 91526.15 | 135561.93 | 9.8294075 | 9.9615452 |
| 29 | 67537.57 | 91579.62 | 135598.03 | 9.8295454 | 9.9617988 |
| 30 | 67559.02 | 91633.12 | 135634.17 | 9.8296833 | 9.9620525 |

# 47 Grad.

| | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 0 | 74314.48 | 111961.25 | 149447.65 | 9.8710735 | 10.0455626 |
| 9 | 74295.01 | 110996.30 | 149399.40 | 9.8709597 | 10.0453085 |
| 8 | 74275.54 | 110931.40 | 149351.18 | 9.8708458 | 10.0450545 |
| 7 | 74256.06 | 110866.53 | 149303.01 | 9.8707319 | 10.0448005 |
| 6 | 74236.57 | 110801.71 | 149254.88 | 9.8706179 | 10.0445465 |
| 55 | 74217.08 | 110736.93 | 149206.80 | 9.8705039 | 10.0442925 |
| 54 | 74197.58 | 110672.19 | 149158.75 | 9.8703898 | 10.0440385 |
| 53 | 74178.08 | 110607.50 | 149110.76 | 9.8702756 | 10.0437846 |
| 52 | 74158.57 | 110542.84 | 149062.80 | 9.8701613 | 10.0435306 |
| 51 | 74139.05 | 110478.23 | 149014.89 | 9.8700470 | 10.0432767 |
| 50 | 74119.53 | 110413.65 | 148967.03 | 9.8699326 | 10.0430228 |
| 49 | 74100.00 | 110349.12 | 148919.20 | 9.8698182 | 10.0427689 |
| 48 | 74080.46 | 110284.63 | 148871.42 | 9.8697037 | 10.0425150 |
| 47 | 74060.92 | 110220.19 | 148823.69 | 9.8695891 | 10.0422611 |
| 46 | 74041.37 | 110155.78 | 148775.99 | 9.8694744 | 10.0420073 |
| 45 | 74021.81 | 110091.41 | 148728.34 | 9.8693597 | 10.0417535 |
| 44 | 74002.25 | 110027.09 | 148680.73 | 9.8692449 | 10.0414996 |
| 43 | 73982.68 | 109962.81 | 148633.17 | 9.8691301 | 10.0412458 |
| 42 | 73963.11 | 109898.56 | 148585.65 | 9.8690152 | 10.0409920 |
| 41 | 73943.53 | 109834.36 | 148538.17 | 9.8689002 | 10.0407382 |
| 40 | 73923.94 | 109770.20 | 148490.73 | 9.8687851 | 10.0404845 |
| 39 | 73904.35 | 109706.08 | 148443.34 | 9.8686700 | 10.0402307 |
| 38 | 73884.75 | 109642.01 | 148395.99 | 9.8685548 | 10.0399770 |
| 37 | 73865.15 | 109577.97 | 148348.68 | 9.8684396 | 10.0397233 |
| 36 | 73845.54 | 109513.97 | 148301.42 | 9.8683242 | 10.0394695 |
| 35 | 73825.92 | 109450.02 | 148254.20 | 9.8682088 | 10.0392158 |
| 34 | 73806.29 | 109386.10 | 148207.02 | 9.8680934 | 10.0389622 |
| 33 | 73786.66 | 109322.23 | 148159.88 | 9.8679779 | 10.0387085 |
| 32 | 73767.02 | 109258.40 | 148112.78 | 9.8678623 | 10.0384548 |
| 31 | 73747.38 | 109194.60 | 148065.73 | 9.8677466 | 10.0382012 |
| 30 | 73727.73 | 109130.85 | 148018.72 | 9.8676309 | 10.0379475 |

# 42 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 67559.02 | 91633.12 | 135634.17 | 9.8296833 | 9.9620525 |
| 31 | 67580.46 | 91686.65 | 135670.34 | 9.8298212 | 9.9623061 |
| 32 | 67601.90 | 91740.20 | 135706.54 | 9.8299589 | 9.9625597 |
| 33 | 67623.33 | 91793.79 | 135742.77 | 9.8300966 | 9.9628133 |
| 34 | 67644.76 | 91847.40 | 135779.03 | 9.8302342 | 9.9630669 |
| 35 | 67666.18 | 91901.04 | 135815.32 | 9.8303717 | 9.9633204 |
| 36 | 67687.60 | 91954.71 | 135851.64 | 9.8305091 | 9.9635740 |
| 37 | 67709.01 | 92008.41 | 135888.00 | 9.8306464 | 9.9638275 |
| 38 | 67730.41 | 92062.14 | 135924.38 | 9.8307837 | 9.9640811 |
| 39 | 67751.81 | 92115.90 | 135960.80 | 9.8309209 | 9.9643346 |
| 40 | 67773.20 | 92169.68 | 135997.25 | 9.8310580 | 9.9645881 |
| 41 | 67794.59 | 92223.50 | 136033.72 | 9.8311950 | 9.9648416 |
| 42 | 67815.97 | 92277.34 | 136070.23 | 9.8313320 | 9.9650951 |
| 43 | 67837.34 | 92331.22 | 136106.77 | 9.8314688 | 9.9653486 |
| 44 | 67858.71 | 92385.12 | 136143.34 | 9.8316056 | 9.9656020 |
| 45 | 67880.07 | 92439.05 | 136179.95 | 9.8317423 | 9.9658555 |
| 46 | 67901.43 | 92493.01 | 136216.58 | 9.8318789 | 9.9661089 |
| 47 | 67922.78 | 92547.00 | 136253.24 | 9.8320155 | 9.9663623 |
| 48 | 67944.13 | 92601.01 | 136289.94 | 9.8321519 | 9.9666157 |
| 49 | 67965.47 | 92655.06 | 136326.67 | 9.8322883 | 9.9668692 |
| 50 | 67986.81 | 92709.14 | 136363.43 | 9.8324246 | 9.9671225 |
| 51 | 68008.14 | 92763.24 | 136400.22 | 9.8325609 | 9.9673759 |
| 52 | 68029.46 | 92817.38 | 136437.04 | 9.8326970 | 9.9676293 |
| 53 | 68050.78 | 92871.54 | 136473.89 | 9.8328331 | 9.9678827 |
| 54 | 68072.09 | 92925.73 | 136510.78 | 9.8329691 | 9.9681360 |
| 55 | 68093.39 | 92979.96 | 136547.70 | 9.8331050 | 9.9683893 |
| 56 | 68114.69 | 93034.21 | 136584.64 | 9.8332408 | 9.9686427 |
| 57 | 68135.99 | 93088.49 | 136621.62 | 9.8333766 | 9.9688960 |
| 58 | 68157.28 | 93142.80 | 136658.63 | 9.8335122 | 9.9691493 |
| 59 | 68178.56 | 93197.14 | 136695.67 | 9.8336478 | 9.9694026 |
| 60 | 68199.84 | 93251.51 | 136732.75 | 9.8337833 | 9.9696559 |

# 47 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 0 | 73727.73 | 109130.85 | 148018.72 | 9.8676309 | 10.0379475 |
| 9 | 73708.08 | 109067.14 | 147971.76 | 9.8675151 | 10.0376939 |
| 8 | 73688.42 | 109003.47 | 147924.83 | 9.8673992 | 10.0374403 |
| 7 | 73668.75 | 108939.83 | 147877.95 | 9.8672833 | 10.0371867 |
| 6 | 73649.07 | 108876.24 | 147831.11 | 9.8671673 | 10.0369331 |
| 5 | 73629.39 | 108812.69 | 147784.31 | 9.8670512 | 10.0366796 |
| 4 | 73609.71 | 108749.18 | 147737.55 | 9.8669351 | 10.0364260 |
| 3 | 73590.02 | 108685.71 | 147690.84 | 9.8668189 | 10.0361725 |
| 22 | 73570.32 | 108622.28 | 147644.17 | 9.8667026 | 10.0359189 |
| 21 | 73550.61 | 108558.89 | 147597.54 | 9.8665863 | 10.0356654 |
| 20 | 73530.90 | 108495.54 | 147550.95 | 9.8664699 | 10.0354119 |
| 19 | 73511.18 | 108432.23 | 147504.40 | 9.8663534 | 10.0351584 |
| 18 | 73491.46 | 108368.96 | 147457.90 | 9.8662369 | 10.0349049 |
| 17 | 73471.73 | 108305.73 | 147411.44 | 9.8661203 | 10.0346514 |
| 16 | 73451.99 | 108242.54 | 147365.01 | 9.8660036 | 10.0343980 |
| 15 | 73432.25 | 108179.39 | 147318.64 | 9.8658868 | 10.0341445 |
| 14 | 73412.50 | 108116.28 | 147272.30 | 9.8657700 | 10.0338911 |
| 13 | 73392.75 | 108053.21 | 147226.00 | 9.8656531 | 10.0336377 |
| 12 | 73372.99 | 107990.18 | 147179.75 | 9.8655362 | 10.0333843 |
| 11 | 73353.22 | 107927.18 | 147133.53 | 9.8654192 | 10.0331308 |
| 10 | 73333.45 | 107864.23 | 147087.36 | 9.8653021 | 10.0328775 |
| 9 | 73313.67 | 107801.32 | 147041.23 | 9.8651849 | 10.0326241 |
| 8 | 73293.88 | 107738.44 | 146995.14 | 9.8650677 | 10.0323707 |
| 7 | 73274.09 | 107675.51 | 146949.10 | 9.8649504 | 10.0321173 |
| 6 | 73254.29 | 107612.82 | 146903.09 | 9.8648331 | 10.0318640 |
| 5 | 73234.48 | 107550.06 | 146857.13 | 9.8647156 | 10.0316107 |
| 4 | 73214.67 | 107487.34 | 146811.20 | 9.8645981 | 10.0313573 |
| 3 | 73194.85 | 107424.67 | 146765.32 | 9.8644806 | 10.0311040 |
| 2 | 73175.03 | 107362.03 | 146719.48 | 9.8643629 | 10.0308507 |
| 1 | 73155.20 | 107299.43 | 146673.68 | 9.8642452 | 10.0305974 |
| 0 | 73135.37 | 107236.87 | 146627.92 | 9.8641275 | 10.0303441 |

# 43 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 68199.84 | 93251.51 | 136732.75 | 9.8337833 | 9.9696559 |
| 1 | 68221.11 | 93305.91 | 136769.85 | 9.8339188 | 9.9699091 |
| 2 | 68242.37 | 93360.34 | 136806.99 | 9.8340541 | 9.9701624 |
| 3 | 68263.63 | 93414.79 | 136844.16 | 9.8341894 | 9.9704157 |
| 4 | 68284.88 | 93469.28 | 136881.36 | 9.8343246 | 9.9706689 |
| 5 | 68306.13 | 93523.80 | 136918.59 | 9.8344597 | 9.9709221 |
| 6 | 68327.37 | 93578.34 | 136955.86 | 9.8345948 | 9.9711754 |
| 7 | 68348.61 | 93632.92 | 136993.15 | 9.8347297 | 9.9714286 |
| 8 | 68369.84 | 93687.53 | 137030.48 | 9.8348646 | 9.9716818 |
| 9 | 68391.07 | 93742.16 | 137067.84 | 9.8349994 | 9.9719350 |
| 10 | 68412.29 | 93796.83 | 137105.23 | 9.8351341 | 9.9721882 |
| 11 | 68433.50 | 93851.52 | 137142.66 | 9.8352688 | 9.9724413 |
| 12 | 68454.71 | 93906.25 | 137180.11 | 9.8354033 | 9.9726945 |
| 13 | 68475.91 | 93961.01 | 137217.60 | 9.8355378 | 9.9729477 |
| 14 | 68497.11 | 94015.79 | 137255.12 | 9.8356722 | 9.9732008 |
| 15 | 68518.30 | 94070.61 | 137292.68 | 9.8358066 | 9.9734539 |
| 16 | 68539.48 | 94125.45 | 137330.26 | 9.8359408 | 9.9737071 |
| 17 | 68560.66 | 94180.33 | 137367.88 | 9.8360750 | 9.9739602 |
| 18 | 68581.83 | 94235.23 | 137405.53 | 9.8362091 | 9.9742133 |
| 19 | 68603.00 | 94290.17 | 137443.21 | 9.8363431 | 9.9744664 |
| 20 | 68624.16 | 94345.13 | 137480.92 | 9.8364771 | 9.9747195 |
| 21 | 68645.32 | 94400.13 | 137518.67 | 9.8366109 | 9.9749726 |
| 22 | 68666.47 | 94455.16 | 137556.45 | 9.8367447 | 9.9752257 |
| 23 | 68687.61 | 94510.21 | 137594.26 | 9.8368784 | 9.9754787 |
| 24 | 68708.75 | 94565.30 | 137632.10 | 9.8370121 | 9.9757318 |
| 25 | 68729.88 | 94620.42 | 137669.98 | 9.8371456 | 9.9759849 |
| 26 | 68751.01 | 94675.56 | 137707.89 | 9.8372791 | 9.9762379 |
| 27 | 68772.13 | 94730.74 | 137745.83 | 9.8374125 | 9.9764909 |
| 28 | 68793.24 | 94785.95 | 137783.80 | 9.8375458 | 9.9767440 |
| 29 | 68814.35 | 94841.19 | 137821.81 | 9.8376790 | 9.9769970 |
| 30 | 68835.45 | 94896.46 | 137859.85 | 9.8378122 | 9.9772500 |

# 46 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 73135.37 | 107236.87 | 146627.92 | 9.8641275 | 10.0303441 |
| 59 | 73115.53 | 107174.35 | 146582.20 | 9.8640096 | 10.0300909 |
| 58 | 73095.68 | 107111.87 | 146536.52 | 9.8638917 | 10.0298376 |
| 57 | 73075.83 | 107049.43 | 146490.88 | 9.8637737 | 10.0295843 |
| 56 | 73055.97 | 106987.02 | 146445.29 | 9.8636557 | 10.0293311 |
| 55 | 73036.10 | 106924.66 | 146399.73 | 9.8635376 | 10.0290779 |
| 54 | 73016.23 | 106862.33 | 146354.22 | 9.8634194 | 10.0288246 |
| 53 | 72996.35 | 106800.04 | 146308.75 | 9.8633011 | 10.0285714 |
| 52 | 72976.46 | 106737.79 | 146263.31 | 9.8631828 | 10.0283182 |
| 51 | 72956.57 | 106675.58 | 146217.92 | 9.8630644 | 10.0280650 |
| 50 | 72936.67 | 106613.41 | 146172.57 | 9.8629460 | 10.0278118 |
| 49 | 72916.77 | 106551.28 | 146127.26 | 9.8628274 | 10.0275587 |
| 48 | 72896.86 | 106489.18 | 146081.98 | 9.8627088 | 10.0273055 |
| 47 | 72876.94 | 106427.13 | 146036.75 | 9.8625902 | 10.0270523 |
| 46 | 72857.02 | 106365.11 | 145991.56 | 9.8624714 | 10.0267992 |
| 45 | 72837.09 | 106303.13 | 145946.41 | 9.8623526 | 10.0265461 |
| 44 | 72817.16 | 106241.19 | 145901.30 | 9.8622338 | 10.0262929 |
| 43 | 72797.22 | 106179.29 | 145856.23 | 9.8621148 | 10.0260398 |
| 42 | 72777.27 | 106117.42 | 145811.20 | 9.8619958 | 10.0257867 |
| 41 | 72757.32 | 106055.60 | 145766.21 | 9.8618767 | 10.0255336 |
| 40 | 72737.36 | 105993.81 | 145721.27 | 9.8617576 | 10.0252805 |
| 39 | 72717.40 | 105932.06 | 145676.36 | 9.8616383 | 10.0250274 |
| 38 | 72697.43 | 105870.34 | 145631.49 | 9.8615190 | 10.0247743 |
| 37 | 72677.45 | 105808.67 | 145586.66 | 9.8613997 | 10.0245213 |
| 36 | 72657.47 | 105747.03 | 145541.87 | 9.8612803 | 10.0242682 |
| 35 | 72637.48 | 105685.44 | 145497.12 | 9.8611608 | 10.0240151 |
| 34 | 72617.48 | 105623.88 | 145452.41 | 9.8610412 | 10.0237621 |
| 33 | 72597.48 | 105562.35 | 145407.74 | 9.8609215 | 10.0235091 |
| 32 | 72577.47 | 105500.87 | 145363.11 | 9.8608018 | 10.0232560 |
| 31 | 72557.46 | 105439.42 | 145318.52 | 9.8606821 | 10.0230030 |
| 30 | 72537.44 | 105378.01 | 145273.97 | 9.8605622 | 10.0227500 |

# 43 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 68835.45 | 94896.46 | 137859.85 | 9.8378122 | 9.9772500 |
| 31 | 68856.55 | 94951.76 | 137897.92 | 9.8379453 | 9.9775030 |
| 32 | 68877.64 | 95007.09 | 137936.02 | 9.8380783 | 9.9777560 |
| 33 | 68898.73 | 95062.45 | 137974.16 | 9.8382112 | 9.9780090 |
| 34 | 68919.81 | 95117.84 | 138012.33 | 9.8383441 | 9.9782620 |
| 35 | 68940.89 | 95173.26 | 138050.53 | 9.8384769 | 9.9785149 |
| 36 | 68961.96 | 95228.71 | 138088.77 | 9.8386096 | 9.9787679 |
| 37 | 68983.02 | 95284.20 | 138127.04 | 9.8387422 | 9.9790209 |
| 38 | 69004.07 | 95339.71 | 138165.34 | 9.8388747 | 9.9792738 |
| 39 | 69025.12 | 95395.26 | 138203.67 | 9.8390072 | 9.9795268 |
| 40 | 69046.17 | 95450.83 | 138242.04 | 9.8391396 | 9.9797797 |
| 41 | 69067.21 | 95506.44 | 138280.44 | 9.8392719 | 9.9800326 |
| 42 | 69188.24 | 95562.08 | 138318.87 | 9.8394041 | 9.9802856 |
| 43 | 69109.27 | 95617.74 | 138357.34 | 9.8395363 | 9.9805385 |
| 44 | 69130.29 | 95673.44 | 138395.84 | 9.8396684 | 9.9807914 |
| 45 | 69151.31 | 95729.17 | 138434.37 | 9.8398004 | 9.9810443 |
| 46 | 69172.32 | 95784.94 | 138472.94 | 9.8399323 | 9.9812972 |
| 47 | 69193.32 | 95840.73 | 138511.54 | 9.8400642 | 9.9815501 |
| 48 | 69214.32 | 95896.55 | 138550.17 | 9.8401959 | 9.9818030 |
| 49 | 69235.31 | 95952.41 | 138588.83 | 9.8403276 | 9.9820559 |
| 50 | 69256.30 | 96008.29 | 138627.53 | 9.8404593 | 9.9823087 |
| 51 | 69277.28 | 96064.21 | 138666.26 | 9.8405908 | 9.9825616 |
| 52 | 69298.25 | 96120.16 | 138705.03 | 9.8407223 | 9.9828145 |
| 53 | 69319.22 | 96176.14 | 138743.83 | 9.8408537 | 9.9830673 |
| 54 | 69340.18 | 96232.15 | 138782.66 | 9.8409850 | 9.9833202 |
| 55 | 69361.14 | 96288.19 | 138821.53 | 9.8411162 | 9.9835730 |
| 56 | 69382.09 | 96344.27 | 138860.42 | 9.8412474 | 9.9838259 |
| 57 | 69403.04 | 96400.37 | 138899.36 | 9.8413785 | 9.9840787 |
| 58 | 69423.98 | 96456.51 | 138938.32 | 9.8415095 | 9.9843315 |
| 59 | 69444.91 | 96512.68 | 138977.32 | 9.8416404 | 9.9845844 |
| 60 | 69465.84 | 96568.88 | 139016.36 | 9.8417713 | 9.9848372 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 71325.05 | 101760.74 | 142671.82 | 9.8532421 | 10.0075803 |
| 29 | 71304.66 | 101701.55 | 142629.61 | 9.8531179 | 10.0073276 |
| 28 | 71284.26 | 101642.39 | 142587.43 | 9.8529936 | 10.0070749 |
| 27 | 71263.85 | 101583.26 | 142545.29 | 9.8528693 | 10.0068222 |
| 26 | 71243.44 | 101524.17 | 142503.19 | 9.8527449 | 10.0065695 |
| 25 | 71223.02 | 101465.12 | 142461.12 | 9.8526204 | 10.0063168 |
| 24 | 71202.60 | 101406.10 | 142419.09 | 9.8524959 | 10.0060641 |
| 23 | 71182.17 | 101347.12 | 142377.10 | 9.8523713 | 10.0058114 |
| 22 | 71161.74 | 101288.17 | 142335.14 | 9.8522466 | 10.0055587 |
| 21 | 71141.30 | 101229.25 | 142293.23 | 9.8521218 | 10.0053060 |
| 20 | 71120.86 | 101170.37 | 142251.34 | 9.8519970 | 10.0050534 |
| 19 | 71100.41 | 101111.53 | 142209.50 | 9.8518721 | 10.0048007 |
| 18 | 71079.95 | 101052.72 | 142167.69 | 9.8517471 | 10.0045480 |
| 17 | 71059.48 | 100993.94 | 142125.92 | 9.8516220 | 10.0042953 |
| 16 | 71039.01 | 100935.20 | 142084.18 | 9.8514969 | 10.0040427 |
| 15 | 71018.54 | 100876.49 | 142042.48 | 9.8513717 | 10.0037900 |
| 14 | 70998.06 | 100817.82 | 142000.82 | 9.8512465 | 10.0035373 |
| 13 | 70977.57 | 100759.18 | 141959.19 | 9.8511211 | 10.0032846 |
| 12 | 70957.07 | 100700.58 | 141917.61 | 9.8509957 | 10.0030320 |
| 11 | 70936.57 | 100642.01 | 141876.05 | 9.8508702 | 10.0027793 |
| 10 | 70916.07 | 100583.47 | 141834.54 | 9.8507446 | 10.0025266 |
| 9 | 70895.56 | 100524.97 | 141793.05 | 9.8506190 | 10.0022740 |
| 8 | 70875.04 | 100466.51 | 141751.61 | 9.8504933 | 10.0020213 |
| 7 | 70854.51 | 100408.07 | 141710.20 | 9.8503675 | 10.0017686 |
| 6 | 70833.98 | 100349.68 | 141668.83 | 9.8502417 | 10.0015160 |
| 5 | 70813.45 | 100291.31 | 141627.49 | 9.8501157 | 10.0012633 |
| 4 | 70792.91 | 100232.98 | 141586.19 | 9.8499897 | 10.0010107 |
| 3 | 70772.36 | 100174.69 | 141544.93 | 9.8498637 | 10.0007580 |
| 2 | 70751.80 | 100116.42 | 141503.70 | 9.8497375 | 10.0005053 |
| 1 | 70731.24 | 100058.19 | 141462.51 | 9.8496113 | 10.0002527 |
| 0 | 70710.68 | 100000.00 | 141421.36 | 9.8494850 | 10.0000000 |

# 45 Grad.

| Minut. | Sinus | Tang. | Secans | *Log.Sin.* | *Log.Tan.* |
|---|---|---|---|---|---|
| 60 | 71933.98 | 103553.03 | 143955.65 | 9.8569341 | 10.0151628 |
| 59 | 71913.77 | 103492.77 | 143912.31 | 9.8568121 | 10.0149100 |
| 58 | 71893.55 | 103432.54 | 143869.00 | 9.8566900 | 10.0146572 |
| 57 | 71873.33 | 103372.35 | 143825.74 | 9.8565678 | 10.0144044 |
| 56 | 71853.10 | 103312.20 | 143782.51 | 9.8564455 | 10.0141516 |
| 55 | 71832.87 | 103252.08 | 143739.32 | 9.8563232 | 10.0138988 |
| 54 | 71812.63 | 103191.99 | 143696.16 | 9.8562008 | 10.0136460 |
| 53 | 71792.38 | 103131.95 | 143653.05 | 9.8560784 | 10.0133932 |
| 52 | 71772.13 | 103071.94 | 143609.97 | 9.8559558 | 10.0131404 |
| 51 | 71751.87 | 103011.96 | 143566.93 | 9.8558332 | 10.0128877 |
| 50 | 71731.61 | 102952.03 | 143523.93 | 9.8557106 | 10.0126349 |
| 49 | 71711.34 | 102892.12 | 143480.97 | 9.8555878 | 10.0123821 |
| 48 | 71691.06 | 102832.26 | 143438.05 | 9.8554650 | 10.0121294 |
| 47 | 71670.78 | 102772.43 | 143395.16 | 9.8553421 | 10.0118766 |
| 46 | 71650.49 | 102712.63 | 143352.31 | 9.8552192 | 10.0116239 |
| 45 | 71630.19 | 102652.87 | 143309.50 | 9.8550961 | 10.0113711 |
| 44 | 71609.89 | 102593.15 | 143266.72 | 9.8549730 | 10.0111184 |
| 43 | 71589.58 | 102533.46 | 143223.99 | 9.8548499 | 10.0108656 |
| 42 | 71569.27 | 102473.81 | 143181.29 | 9.8547266 | 10.0106129 |
| 41 | 71548.95 | 102414.19 | 143138.63 | 9.8546033 | 10.0103601 |
| 40 | 71528.63 | 102354.61 | 143096.00 | 9.8544799 | 10.0101014 |
| 39 | 71508.30 | 102295.06 | 143053.42 | 9.8543564 | 10.0098547 |
| 38 | 71487.96 | 102235.55 | 143010.87 | 9.8542329 | 10.0096019 |
| 37 | 71467.62 | 102176.08 | 142968.36 | 9.8541093 | 10.0093492 |
| 36 | 71447.27 | 102116.64 | 142925.88 | 9.8539856 | 10.0090965 |
| 35 | 71426.91 | 102057.23 | 142883.44 | 9.8538619 | 10.0088438 |
| 34 | 71406.55 | 101997.86 | 142841.04 | 9.8537381 | 10.0085911 |
| 33 | 71386.18 | 101938.53 | 142798.68 | 9.8536142 | 10.0083384 |
| 32 | 71365.81 | 101879.23 | 142756.36 | 9.8534902 | 10.0080857 |
| 31 | 71345.43 | 101819.97 | 142714.07 | 9.8533662 | 10.0078330 |
| 30 | 71325.05 | 101760.74 | 142671.82 | 9.8532421 | 10.0075803 |

# 44 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 70090.93 | 98269.73 | 140203.21 | 9.8456618 | 9.9924197 |
| 31 | 70111.67 | 98326.92 | 140243.30 | 9.8457903 | 9.9926724 |
| 32 | 70132.41 | 98384.15 | 140283.43 | 9.8459188 | 9.9929251 |
| 33 | 70153.14 | 98441.41 | 140323.60 | 9.8460471 | 9.9931778 |
| 34 | 70173.87 | 98498.71 | 140363.80 | 9.8461754 | 9.9934305 |
| 35 | 70194.59 | 98556.03 | 140404.03 | 9.8463036 | 9.9936832 |
| 36 | 70215.30 | 98613.39 | 140444.30 | 9.8464318 | 9.9939359 |
| 37 | 70236.01 | 98670.79 | 140484.60 | 9.8465599 | 9.9941886 |
| 38 | 70256.71 | 98728.21 | 140524.94 | 9.8466879 | 9.9944413 |
| 39 | 70277.41 | 98785.67 | 140565.32 | 9.8468158 | 9.9946940 |
| 40 | 70298.10 | 98843.16 | 140605.73 | 9.8469436 | 9.9949466 |
| 41 | 70318.79 | 98900.69 | 140646.17 | 9.8470714 | 9.9951993 |
| 42 | 70339.47 | 98958.25 | 140686.65 | 9.8471991 | 9.9954520 |
| 43 | 70360.14 | 99015.84 | 140727.17 | 9.8473267 | 9.9957047 |
| 44 | 70380.81 | 99073.46 | 140767.72 | 9.8474543 | 9.9959573 |
| 45 | 70401.47 | 99131.12 | 140808.31 | 9.8475817 | 9.9962100 |
| 46 | 70422.13 | 99188.81 | 140848.93 | 9.8477091 | 9.9964627 |
| 47 | 70442.78 | 99246.54 | 140889.58 | 9.8478365 | 9.9967154 |
| 48 | 70463.42 | 99304.29 | 140930.28 | 9.8479637 | 9.9969680 |
| 49 | 70484.06 | 99362.08 | 140971.00 | 9.8480909 | 9.9972207 |
| 50 | 70504.69 | 99419.91 | 141011.77 | 9.8482180 | 9.9974734 |
| 51 | 70525.32 | 99477.77 | 141052.56 | 9.8483450 | 9.9977260 |
| 52 | 70545.94 | 99535.66 | 141093.40 | 9.8484720 | 9.9979787 |
| 53 | 70566.55 | 99593.58 | 141134.27 | 9.8485989 | 9.9982314 |
| 54 | 70587.16 | 99651.54 | 141175.17 | 9.8487257 | 9.9984840 |
| 55 | 70607.76 | 99709.53 | 141216.11 | 9.8488524 | 9.9987367 |
| 56 | 70628.35 | 99767.56 | 141257.09 | 9.8489791 | 9.9989893 |
| 57 | 70648.94 | 99825.62 | 141298.10 | 9.8491057 | 9.9992420 |
| 58 | 70669.53 | 99883.71 | 141339.15 | 9.8492322 | 9.9994947 |
| 59 | 70690.11 | 99941.84 | 141380.24 | 9.8493586 | 9.9997473 |
| 60 | 70710.68 | 100000.00 | 141421.36 | 9.8494850 | 10.0000000 |

# 46 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 72537:44 | 105378.01 | 145273.97 | 9.8605622 | 10.0227500 |
| 29 | 72517.41 | 105316.64 | 145229.46 | 9.8604423 | 10.0224970 |
| 28 | 72497.38 | 105255.31 | 145184.98 | 9.8603223 | 10.0222440 |
| 27 | 72477.34 | 105194:01 | 145140.55 | 9.8602022 | 10.0219910 |
| 26 | 72457.29 | 105132.75 | 145096.16 | 9.8600821 | 10.0217380 |
| 25 | 72437.24 | 105071.53 | 145051.81 | 9.8599619 | 10.0214851 |
| 24 | 72417.18 | 105010.34 | 145007.49 | 9.8598416 | 10.0212321 |
| 23 | 72397.12 | 104949.20 | 144963.22 | 9.8597213 | 10.0209791 |
| 22 | 72377.05 | 104888.09 | 144918.98 | 9.8596009 | 10.0207262 |
| 21 | 72356.98 | 104827.02 | 144874.78 | 9.8594804 | 10.0204732 |
| 20 | 72336.90 | 104765.98 | 144830:63 | 9.8593599 | 10.0202203 |
| 19 | 72316.81 | 104704.98 | 144786.51 | 9.8592393 | 10.0199674 |
| 18 | 72296.71 | 104644.02 | 144742.43 | 9.8591186 | 10.0197144 |
| 17 | 72276.61 | 104583.10 | 144698.39 | 9.8589978 | 10:0194615 |
| 16 | 72256.51 | 104522.21 | 144654.39 | 9.8588770 | 10.0192086 |
| 15 | 72236.40 | 104461.36 | 144610.43 | 9.8587561 | 10.0189557 |
| 14 | 72216.28 | 104400.55 | 144566.51 | 9.8586351 | 10:0187028 |
| 13 | 72196.15 | 104339:77 | 144522:62 | 9.8585141 | 10.0184499 |
| 12 | 72176.02 | 104279.04 | 144478.78 | 9.8583929 | 10.0181970 |
| 11 | 72155.88 | 104218.33 | 144434.97 | 9.8582718 | 10.0179441 |
| 10 | 72135.74 | 104157:67 | 144391.20 | 9.8581505 | 10.0176913 |
| 9 | 72115.59 | 104097:04 | 144347.48 | 9.8580292 | 10.0174384 |
| 8 | 72095.44 | 104036.45 | 144303.79 | 9.8579078 | 10.0171855 |
| 7 | 72075.28 | 103975.89 | 144260.13 | 9.8577863 | 10.0169327 |
| 6 | 72055.11 | 103915.37 | 144216.52 | 9.8576648 | 10.0166798 |
| 5 | 72034.94 | 103854.89 | 144172.95 | 9.8575432 | 10.0164270 |
| 4 | 72014.76 | 103794.45 | 144129.41 | 9.8574215 | 10.0161741 |
| 3 | 71994.57 | 103734.04 | 144085.91 | 9.8572998 | 10.0159213 |
| 2 | 71974.38 | 103673.67 | 144042.46 | 9.8571779 | 10.0156685 |
| 1 | 71954.18 | 103613.33 | 143999.04 | 9.8570561 | 10.0154156 |
| 0 | 71933.98 | 103553.03 | 143955.65 | 9.8569341 | 10.0151628 |

# 44 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 69465.84 | 96568.88 | 139016.36 | 9.8417713 | 9.9848372 |
| 1 | 69486.76 | 96625.11 | 139055.43 | 9.8419021 | 9.9850900 |
| 2 | 69507.67 | 96681.37 | 139094.53 | 9.8420328 | 9.9853428 |
| 3 | 69528.58 | 96737.67 | 139133.66 | 9.8421634 | 9.9855956 |
| 4 | 69549.49 | 96794.00 | 139172.83 | 9.8422939 | 9.9858484 |
| 5 | 69570.39 | 96850.35 | 139212.03 | 9.8424244 | 9.9861012 |
| 6 | 69591.28 | 96906.74 | 139251.27 | 9.8425548 | 9.9863540 |
| 7 | 69612.17 | 96963.16 | 139290.54 | 9.8426851 | 9.9866068 |
| 8 | 69633.05 | 97019.62 | 139329.85 | 9.8428154 | 9.9868596 |
| 9 | 69653.92 | 97076.10 | 139369.18 | 9.8429456 | 9.9871123 |
| 10 | 69674.79 | 97132.62 | 139408.56 | 9.8430757 | 9.9873651 |
| 11 | 69695.65 | 97189.17 | 139447.96 | 9.8432057 | 9.9876179 |
| 12 | 69716.51 | 97245.75 | 139487.40 | 9.8433356 | 9.9878706 |
| 13 | 69737.36 | 97302.36 | 139526.88 | 9.8434655 | 9.9881234 |
| 14 | 69758.21 | 97359.01 | 139566.39 | 9.8435953 | 9.9883761 |
| 15 | 69779.05 | 97415.69 | 139605.93 | 9.8437250 | 9.9886289 |
| 16 | 69799.88 | 97472.40 | 139645.51 | 9.8438547 | 9.9888816 |
| 17 | 69820.71 | 97529.14 | 139685.12 | 9.8439842 | 9.9891344 |
| 18 | 69841.53 | 97585.91 | 139724.77 | 9.8441137 | 9.9893871 |
| 19 | 69862.34 | 97642.72 | 139764.45 | 9.8442432 | 9.9896399 |
| 20 | 69883.15 | 97699.56 | 139804.16 | 9.8443725 | 9.9898926 |
| 21 | 69903.96 | 97756.43 | 139843.91 | 9.8445018 | 9.9901453 |
| 22 | 69924.76 | 97813.33 | 139883.69 | 9.8446310 | 9.9903981 |
| 23 | 69945.55 | 97870.27 | 139923.51 | 9.8447601 | 9.9906508 |
| 24 | 69966.33 | 97927.24 | 139963.36 | 9.8448891 | 9.9909035 |
| 25 | 69987.11 | 97984.24 | 140003.25 | 9.8450181 | 9.9911562 |
| 26 | 70007.89 | 98041.27 | 140043.17 | 9.8451470 | 9.9914089 |
| 27 | 70028.66 | 98098.33 | 140083.13 | 9.8452758 | 9.9916616 |
| 28 | 70049.42 | 98155.43 | 140123.12 | 9.8454045 | 9.9919143 |
| 29 | 70070.18 | 98212.56 | 140163.15 | 9.8455332 | 9.9921670 |
| 30 | 70090.93 | 98269.73 | 140203.21 | 9.8456618 | 9.9924197 |

| N. | Logarith | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 601 | 2.7788745 | 634 | 2.8020893 | 667 | 2.8241258 |
| 602 | 2.7795965 | 635 | 2.8027737 | 668 | 2.8247765 |
| 603 | 9.7803173 | 636 | 2.8034571 | 669 | 2.8254261 |
| 604 | 2.7810369 | 637 | 2.8041394 | 670 | 2.8260748 |
| 605 | 2.7817554 | 638 | 2.8048207 | 671 | 2.8267225 |
| 606 | 2.7824726 | 639 | 2.8055009 | 672 | 2.8273693 |
| 607 | 2.7831887 | 640 | 2.8061800 | 673 | 2.8280151 |
| 608 | 2.7839036 | 641 | 2.8068580 | 674 | 2.8286599 |
| 609 | 2.7846173 | 642 | 2.8075350 | 675 | 2.8293038 |
| 610 | 2.7853298 | 643 | 2.8082110 | 676 | 2.8299467 |
| 611 | 2.7860412 | 644 | 2.8088859 | 677 | 2.8305887 |
| 612 | 2.7867514 | 645 | 2.8095597 | 678 | 2.8312297 |
| 613 | 2.7874605 | 646 | 2.8102325 | 679 | 2.8318698 |
| 614 | 2.7881684 | 647 | 2.8109043 | 680 | 2.8325089 |
| 615 | 2.7888751 | 648 | 2.8115750 | 681 | 2.8331471 |
| 616 | 2.7895807 | 649 | 2.8122447 | 682 | 2.8337844 |
| 617 | 2.7902852 | 650 | 2.8129134 | 683 | 2.8344207 |
| 618 | 2.7909885 | 651 | 2.8135810 | 684 | 2.8350561 |
| 619 | 2.7916906 | 652 | 2.8142476 | 685 | 2.8356906 |
| 620 | 2.7923917 | 653 | 2.8149132 | 686 | 2.8363241 |
| 621 | 2.7930916 | 654 | 2.8155777 | 687 | 2.8369567 |
| 622 | 2.7937904 | 655 | 2.8162413 | 688 | 2.8375884 |
| 623 | 2.7944880 | 656 | 2.8169038 | 689 | 2.8382192 |
| 624 | 2.7951846 | 657 | 2.8175654 | 690 | 2.8388491 |
| 625 | 2.7958800 | 658 | 2.8182259 | 691 | 2.8394780 |
| 626 | 2.7965744 | 659 | 2.8188854 | 692 | 2.8401061 |
| 627 | 2.7972675 | 660 | 2.8195439 | 693 | 2.8407332 |
| 628 | 2.7979596 | 661 | 2.8202015 | 694 | 2.8413595 |
| 629 | 2.7986506 | 662 | 2.8208580 | 695 | 2.8419848 |
| 630 | 2.7993405 | 663 | 2.8215135 | 696 | 2.8426092 |
| 631 | 2.8000294 | 664 | 2.8221681 | 697 | 2.8432328 |
| 632 | 2.8007171 | 665 | 2.8228216 | 698 | 2.8438554 |
| 633 | 2.8014037 | 666 | 2.8234742 | 699 | 2.8444772 |
| 634 | 2.8020893 | 667 | 2.8241258 | 700 | 2.8450980 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 701 | 2.8457180 | 734 | 2.8656961 | 767 | 2.8847954 |
| 702 | 2.8463371 | 735 | 2.8662873 | 768 | 2.8853612 |
| 703 | 2.8469553 | 736 | 2.8668778 | 769 | 2.8859263 |
| 704 | 2.8475727 | 737 | 2.8674675 | 770 | 2.8864907 |
| 705 | 2.8481891 | 738 | 2.8680564 | 771 | 2.8870544 |
| 706 | 2.8488047 | 739 | 2.8686444 | 772 | 2.8876173 |
| 707 | 2.8494194 | 740 | 2.8692317 | 773 | 2.8881795 |
| 708 | 2.8500333 | 741 | 2.8698182 | 774 | 2.8887410 |
| 709 | 2.8506462 | 742 | 2.8704039 | 775 | 2.8893017 |
| 710 | 2.8512583 | 743 | 2.8709888 | 776 | 2.8898617 |
| 711 | 2.8518696 | 744 | 2.8715729 | 777 | 2.8904210 |
| 712 | 2.8524800 | 745 | 2.8721563 | 778 | 2.8909796 |
| 713 | 2.8530895 | 746 | 2.8727388 | 779 | 2.8915375 |
| 714 | 2.8536982 | 747 | 2.8733206 | 780 | 2.8920946 |
| 715 | 2.8543060 | 748 | 2.8739016 | 781 | 2.8926510 |
| 716 | 2.8549130 | 749 | 2.8744818 | 782 | 2.8932067 |
| 717 | 2.8555191 | 750 | 2.8750613 | 783 | 2.8937618 |
| 718 | 2.8561244 | 751 | 2.8756399 | 784 | 2.8943161 |
| 719 | 2.8567289 | 752 | 2.8762178 | 785 | 2.8948696 |
| 720 | 2.8573325 | 753 | 2.8767950 | 786 | 2.8954225 |
| 721 | 2.8579353 | 754 | 2.8773713 | 787 | 2.8959747 |
| 722 | 2.8585372 | 755 | 2.8779469 | 788 | 2.8965262 |
| 723 | 2.8591383 | 756 | 2.8785218 | 789 | 2.8970770 |
| 724 | 2.8597386 | 757 | 2.8790959 | 790 | 2.8976271 |
| 725 | 2.8603380 | 758 | 2.8796692 | 791 | 2.8981765 |
| 726 | 2.8609366 | 759 | 2.8802418 | 792 | 2.8987252 |
| 727 | 2.8615344 | 760 | 2.8808136 | 793 | 2.8992732 |
| 728 | 2.8621314 | 761 | 2.8813847 | 794 | 2.8998205 |
| 729 | 2.8627275 | 762 | 2.8819550 | 795 | 2.9003671 |
| 730 | 2.8633229 | 763 | 2.8825245 | 796 | 2.9009131 |
| 731 | 2.8639174 | 764 | 2.8830934 | 797 | 2.9014583 |
| 732 | 2.8645111 | 765 | 2.8836614 | 798 | 2.9020029 |
| 733 | 2.8651040 | 766 | 2.8842288 | 799 | 2.9025468 |
| 734 | 2.8656961 | 767 | 2.8847954 | 800 | 2.9030900 |

| N. | Logarith | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 401 | 2.6031444 | 434 | 2.6374897 | 467 | 2.6693169 |
| 402 | 2.6042260 | 435 | 2.6384893 | 468 | 2.6702458 |
| 403 | 2.6053050 | 436 | 2.6394865 | 469 | 2.6711728 |
| 404 | 2.6063814 | 437 | 2.6404814 | 470 | 2.6720979 |
| 405 | 2.6074550 | 438 | 2.6414741 | 471 | 2.6730209 |
| 406 | 2.6085260 | 439 | 2.6424645 | 472 | 2.6739420 |
| 407 | 2.6095944 | 440 | 2.6434527 | 473 | 2.6748611 |
| 408 | 2.6106602 | 441 | 2.6444386 | 474 | 2.6757783 |
| 409 | 2.6117233 | 442 | 2.6454223 | 475 | 2.6766936 |
| 410 | 2.6127839 | 443 | 2.6464037 | 476 | 2.6776069 |
| 411 | 2.6138418 | 444 | 2.6473830 | 477 | 2.6785184 |
| 412 | 2.6148972 | 445 | 2.6483600 | 478 | 2.6794279 |
| 413 | 2.6159500 | 446 | 2.6493349 | 479 | 2.6803355 |
| 414 | 2.6170003 | 447 | 2.6503075 | 480 | 2.6812412 |
| 415 | 2.6180481 | 448 | 2.6512780 | 481 | 2.6821451 |
| 416 | 2.6190933 | 449 | 2.6522463 | 482 | 2.6830470 |
| 417 | 2.6201360 | 450 | 2.6532125 | 483 | 2.6839471 |
| 418 | 2.6211763 | 451 | 2.6541765 | 484 | 2.6848454 |
| 419 | 2.6222140 | 452 | 2.6551384 | 485 | 2.6857417 |
| 420 | 2.6232493 | 453 | 2.6560982 | 486 | 2.6866363 |
| 421 | 2.6242821 | 454 | 2.6570558 | 487 | 2.6875290 |
| 422 | 2.6253124 | 455 | 2.6580114 | 488 | 2.6884198 |
| 423 | 2.6263404 | 456 | 2.6589648 | 489 | 2.6893089 |
| 424 | 2.6273659 | 457 | 2.6599162 | 490 | 2.6901961 |
| 425 | 2.6283889 | 458 | 2.6608655 | 491 | 2.6910815 |
| 426 | 2.6294096 | 459 | 2.6618127 | 492 | 2.6919651 |
| 427 | 2.6304279 | 460 | 2.6627578 | 493 | 2.6928469 |
| 428 | 2.6314438 | 461 | 2.6637009 | 494 | 2.6937269 |
| 429 | 2.6324573 | 462 | 2.6646420 | 495 | 2.6946052 |
| 430 | 2.6334685 | 463 | 2.6655810 | 496 | 2.6954817 |
| 431 | 2.6344773 | 464 | 2.6665180 | 497 | 2.6963564 |
| 432 | 2.6354837 | 465 | 2.6674529 | 498 | 2.6972293 |
| 433 | 2.6364879 | 466 | 2.6683859 | 499 | 2.6981005 |
| 434 | 2.6374897 | 467 | 2.6693169 | 500 | 2.6989700 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 501 | 2.6998377 | 534 | 2.7275413 | 567 | 2.7535831 |
| 502 | 2.7007037 | 535 | 2.7283538 | 568 | 2.7543483 |
| 503 | 2.7015680 | 536 | 2.7291648 | 569 | 2.7551123 |
| 504 | 2.7024305 | 537 | 2.7299743 | 570 | 2.7558748 |
| 505 | 2.7032914 | 538 | 2.7307823 | 571 | 2.7566361 |
| 506 | 2.7041505 | 539 | 2.7315888 | 572 | 2.7573960 |
| 507 | 2.7050080 | 540 | 2.7323938 | 573 | 2.7581546 |
| 508 | 2.7058637 | 541 | 2.7331973 | 574 | 2.7589119 |
| 509 | 2.7067178 | 542 | 2.7339993 | 575 | 2.7596678 |
| 510 | 2.7075702 | 543 | 2.7347998 | 576 | 2.7604225 |
| 511 | 2.7084209 | 544 | 2.7355989 | 577 | 2.7611758 |
| 512 | 2.7092700 | 545 | 2.7363965 | 578 | 2.7619278 |
| 513 | 2.7101174 | 546 | 2.7371926 | 579 | 2.7626786 |
| 514 | 2.7109631 | 547 | 2.7379873 | 580 | 2.7634280 |
| 515 | 2.7118072 | 548 | 2.7387806 | 581 | 2.7641761 |
| 516 | 2.7126497 | 549 | 2.7395723 | 582 | 2.7649230 |
| 517 | 2.7134905 | 550 | 2.7403627 | 583 | 2.7656685 |
| 518 | 2.7143298 | 551 | 2.7411516 | 584 | 2.7664128 |
| 519 | 2.7151674 | 552 | 2.7419391 | 585 | 2.7671559 |
| 520 | 2.7160033 | 553 | 2.7427251 | 586 | 2.7678976 |
| 521 | 2.7168377 | 554 | 2.7435098 | 587 | 2.7686381 |
| 522 | 2.7176705 | 555 | 2.7442930 | 588 | 2.7693773 |
| 523 | 2.7185017 | 556 | 2.7450748 | 589 | 2.7701153 |
| 524 | 2.7193313 | 557 | 2.7458552 | 590 | 2.7708520 |
| 525 | 2.7201593 | 558 | 2.7456342 | 591 | 2.7715875 |
| 526 | 2.7209857 | 559 | 2.7474118 | 592 | 2.7723217 |
| 527 | 2.7218106 | 560 | 2.7481880 | 593 | 2.7730547 |
| 528 | 2.7226339 | 561 | 2.7489629 | 594 | 2.7737864 |
| 529 | 2.7234557 | 562 | 2.7497363 | 595 | 2.7745170 |
| 530 | 2.7242759 | 563 | 2.7505084 | 596 | 2.7752463 |
| 531 | 2.7250945 | 564 | 2.7512791 | 597 | 2.7759743 |
| 532 | 2.7259116 | 565 | 2.7520484 | 598 | 2.7767012 |
| 533 | 2.7267272 | 566 | 2.7528164 | 599 | 2.7774268 |
| 534 | 2.7275413 | 567 | 2.7535831 | 600 | 2.7781512 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 201 | 2.3031961 | 234 | 2.3692159 | 267 | 2.4265113 |
| 202 | 2.3053514 | 235 | 2.3710679 | 268 | 2.4281348 |
| 203 | 2.3074960 | 236 | 2.3719120 | 269 | 2.4297523 |
| 204 | 2.3096302 | 237 | 2.3747483 | 270 | 2.4313638 |
| 205 | 2.3117539 | 238 | 2.3765769 | 271 | 2.4329693 |
| 206 | 2.3138672 | 239 | 2.3783979 | 272 | 2.4345689 |
| 207 | 2.3159703 | 240 | 2.3803112 | 273 | 2.4361626 |
| 208 | 2.3180633 | 241 | 2.3820170 | 274 | 2.4377506 |
| 209 | 2.3201463 | 242 | 2.3838154 | 275 | 2.4393327 |
| 210 | 2.3222193 | 243 | 2.3856063 | 276 | 2.4409091 |
| 211 | 2.3242824 | 244 | 2.3873898 | 277 | 2.4424798 |
| 212 | 2.3263359 | 245 | 2.3891661 | 278 | 2.4440448 |
| 213 | 2.3283796 | 246 | 2.3909351 | 279 | 2.4456042 |
| 214 | 2.3304138 | 247 | 2.3926969 | 280 | 2.4471580 |
| 215 | 2.3324385 | 248 | 2.3944517 | 281 | 2.4487063 |
| 216 | 2.3344537 | 249 | 2.3961993 | 282 | 2.4502491 |
| 217 | 2.3364597 | 250 | 2.3979400 | 283 | 2.4517864 |
| 218 | 2.3384565 | 251 | 2.3996737 | 284 | 2.4533183 |
| 219 | 2.3404441 | 252 | 2.4014005 | 285 | 2.4548449 |
| 220 | 2.3424227 | 253 | 2.4031205 | 286 | 2.4563660 |
| 221 | 2.3443923 | 254 | 2.4048337 | 287 | 2.4578819 |
| 222 | 2.3463530 | 255 | 2.4065402 | 288 | 2.4593925 |
| 223 | 2.3483049 | 256 | 2.4082400 | 289 | 2.4608978 |
| 224 | 2.3502480 | 257 | 2.4099331 | 290 | 2.4623980 |
| 225 | 2.3521825 | 258 | 2.4116197 | 291 | 2.4638930 |
| 226 | 2.3541084 | 259 | 2.4132998 | 292 | 2.4653828 |
| 227 | 2.3560259 | 260 | 2.4149733 | 293 | 2.4668676 |
| 228 | 2.3579348 | 261 | 2.4166405 | 294 | 2.4683473 |
| 229 | 2.3598355 | 262 | 2.4183013 | 295 | 2.4698220 |
| 230 | 2.3617278 | 263 | 2.4199557 | 295 | 2.4712917 |
| 231 | 2.3636120 | 264 | 2.4216039 | 297 | 2.4727564 |
| 232 | 2.3654880 | 265 | 2.4232459 | 298 | 2.4742163 |
| 233 | 2.3673559 | 266 | 2.4248816 | 299 | 2.4756712 |
| 234 | 2.3692159 | 267 | 2.4265113 | 300 | 2.4771212 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 301 | 2.4785665 | 334 | 2.5237465 | 367 | 2.5646661 |
| 302 | 2.4800069 | 335 | 2.5250448 | 368 | 2.5658478 |
| 303 | 2.4814426 | 336 | 2.5263393 | 369 | 2.5670264 |
| 304 | 2.4828736 | 337 | 2.5276299 | 370 | 2.5682017 |
| 305 | 2.4842998 | 338 | 2.5289167 | 371 | 2.5693739 |
| 306 | 2.4857214 | 339 | 2.5301997 | 372 | 2.5705429 |
| 307 | 2.4871384 | 340 | 2.5314789 | 373 | 2.5717088 |
| 308 | 2.4885507 | 341 | 2.5327544 | 374 | 2.5728716 |
| 309 | 2.4899585 | 342 | 2.5340261 | 375 | 2.5740313 |
| 310 | 2.4913617 | 343 | 2.5352941 | 376 | 2.5751878 |
| 311 | 2.4927604 | 344 | 2.5365584 | 377 | 2.5763413 |
| 312 | 2.4941546 | 345 | 2.5378191 | 378 | 2.5774918 |
| 313 | 2.4955443 | 346 | 2.5390761 | 379 | 2.5786392 |
| 314 | 2.4969296 | 347 | 2.5403295 | 380 | 2.5797836 |
| 315 | 2.4983105 | 348 | 2.5415792 | 381 | 2.5809250 |
| 316 | 2.4996871 | 349 | 2.5428254 | 382 | 2.5820634 |
| 317 | 2.5010593 | 350 | 2.5440680 | 383 | 2.5831988 |
| 318 | 2.5024271 | 351 | 2.5453071 | 384 | 2.5843312 |
| 319 | 2.5037907 | 352 | 2.5465427 | 385 | 2.5854607 |
| 320 | 2.5051500 | 353 | 2.5477747 | 386 | 2.5865873 |
| 321 | 2.5065050 | 354 | 2.5490033 | 387 | 2.5877110 |
| 322 | 2.5078559 | 355 | 2.5502283 | 388 | 2.5888317 |
| 323 | 2.5092025 | 356 | 2.5514500 | 389 | 2.5899496 |
| 324 | 2.5105450 | 357 | 2.5526682 | 390 | 2.5910646 |
| 325 | 2.5118834 | 358 | 2.5538830 | 391 | 2.5921768 |
| 326 | 2.5132176 | 359 | 2.5550944 | 392 | 2.5932861 |
| 327 | 2.5145477 | 360 | 2.5563025 | 393 | 2.5943925 |
| 328 | 2.5158738 | 361 | 2.5575072 | 394 | 2.5954962 |
| 329 | 2.5171959 | 362 | 2.5587086 | 395 | 2.5965971 |
| 330 | 2.5185139 | 363 | 2.5599066 | 396 | 2.5976952 |
| 331 | 2.5198280 | 364 | 2.5611014 | 397 | 2.5987905 |
| 332 | 2.5211381 | 365 | 2.5622929 | 398 | 2.5998831 |
| 333 | 2.5224442 | 366 | 2.5634811 | 399 | 2.6009729 |
| 334 | 2.5237465 | 367 | 2.5646661 | 400 | 2.6020600 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 1 | 0.0000000 | 34 | 1.5314789 | 67 | 1.8260748 |
| 2 | 0.3010300 | 35 | 1.5440680 | 68 | 1.8325089 |
| 3 | 0.4771212 | 36 | 1.5563025 | 69 | 1.8388491 |
| 4 | 0.6020600 | 37 | 1.5682017 | 70 | 1.8450980 |
| 5 | 0.6989700 | 38 | 1.5797836 | 71 | 1.8512583 |
| 6 | 0.7781512 | 39 | 1.5910646 | 72 | 1.8573325 |
| 7 | 0.8450980 | 40 | 1.6020600 | 73 | 1.8633229 |
| 8 | 0.9030900 | 41 | 1.6127839 | 74 | 1.8692317 |
| 9 | 0.9542425 | 42 | 1.6232493 | 75 | 1.8750613 |
| 10 | 1.0000000 | 43 | 1.6334685 | 76 | 1.8808136 |
| 11 | 1.0413927 | 44 | 1.6434527 | 77 | 1.8864907 |
| 12 | 1.0791812 | 45 | 1.6532125 | 78 | 1·8920946 |
| 13 | 1.1139433 | 46 | 1,6627578 | 79 | 1.8976271 |
| 14 | 1,1461280 | 47 | 1.6720979 | 80 | 1.9030900 |
| 15 | 1.1760913 | 48 | 1.6812412 | 81 | 1.9084850 |
| 16 | 1.2041200 | 49 | 1.6901961 | 82 | 1.9138138 |
| 17 | 1.2304489 | 50 | 1.6989700 | 83 | 1.9190781 |
| 18 | 1.2552725 | 51 | 1.7075702 | 84 | 1,9242793 |
| 19 | 1.2787536 | 52 | 1.7160033 | 85 | 1.9294189 |
| 20 | 1.3010300 | 53 | 1.7242759 | 86 | 1.9344984 |
| 21 | 1.3222193 | 54 | 1.7323938 | 87 | 1.9395192 |
| 22 | 1.3424227 | 55 | 1.7403627 | 88 | 1.9444827 |
| 23 | 1.3617278 | 56 | 1.7481880 | 89 | 1.9493900 |
| 24 | 1.3802112 | 57 | 1.7558748 | 90 | 1.9542425 |
| 25 | 1.3979400 | 58 | 1.7634280 | 91 | 1.9590414 |
| 26 | 1.4149733 | 59 | 1.7708520 | 92 | 1.9637878 |
| 27 | 1.4313638 | 60 | 1.7781512 | 93 | 1.9684829 |
| 28 | 1.4471580 | 61 | 1.7853298 | 94 | 1.9731278 |
| 29 | 1.4623980 | 62 | 1.7923917 | 95 | 1.9777236 |
| 30 | 1.4771212 | 63 | 1.7993405 | 96 | 1.9822712 |
| 31 | 1.4913617 | 64 | 1.8061800 | 97 | 1.9867717 |
| 32 | 1.5051500 | 65 | 1.8129133 | 98 | 1.9912261 |
| 33 | 1.5185139 | 66 | 1.8195439 | 99 | 1.9956352 |
| 34 | 1.5314789 | 67 | 1.8260748 | 100 | 2.0000000 |

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 60 | 71933.98 | 103553.03 | 143955.65 | 9.8569341 | 10.0151628 |
| 59 | 71913.77 | 103492.77 | 143912.31 | 9.8568121 | 10.0149100 |
| 58 | 71893.55 | 103432.54 | 143869.00 | 9.8566900 | 10.0146572 |
| 57 | 71873.33 | 103372.35 | 143825.74 | 9.8565678 | 10.0144044 |
| 56 | 71853.10 | 103312.20 | 143782.51 | 9.8564455 | 10.0141516 |
| 55 | 71832.87 | 103252.08 | 143739.32 | 9.8563232 | 10.0138988 |
| 54 | 71812.63 | 103191.99 | 143696.16 | 9.8562008 | 10.0136460 |
| 53 | 71792.38 | 103131.95 | 143653.05 | 9.8560784 | 10.0133932 |
| 52 | 71772.13 | 103071.94 | 143609.97 | 9.8559558 | 10.0131404 |
| 51 | 71751.87 | 103011.96 | 143566.93 | 9.8558332 | 10.0128877 |
| 50 | 71731.61 | 102952.03 | 143523.93 | 9.8557106 | 10.0126349 |
| 49 | 71711.34 | 102892.12 | 143480.97 | 9.8555878 | 10.0123821 |
| 48 | 71691.06 | 102832.26 | 143438.05 | 9.8554650 | 10.0121294 |
| 47 | 71670.78 | 102772.43 | 143395.16 | 9.8553421 | 10.0118766 |
| 46 | 71650.49 | 102712.63 | 143352.31 | 9.8552192 | 10.0116239 |
| 45 | 71630.19 | 102652.87 | 143309.50 | 9.8550961 | 10.0113711 |
| 44 | 71609.89 | 102593.15 | 143266.72 | 9.8549730 | 10.0111184 |
| 43 | 71589.58 | 102533.46 | 143223.99 | 9.8548499 | 10.0108656 |
| 42 | 71569.27 | 102473.81 | 143181.29 | 9.8547266 | 10.0106129 |
| 41 | 71548.95 | 102414.19 | 143138.63 | 9.8546033 | 10.0103601 |
| 40 | 71528.63 | 102354.61 | 143096.00 | 9.8544799 | 10.0101014 |
| 39 | 71508.30 | 102295.06 | 143053.42 | 9.8543564 | 10.0098547 |
| 38 | 71487.96 | 102235.55 | 143010.87 | 9.8542329 | 10.0096019 |
| 37 | 71467.62 | 102176.08 | 142968.36 | 9.8541093 | 10.0093492 |
| 36 | 71447.27 | 102116.64 | 142925.88 | 9.8539856 | 10.0090965 |
| 35 | 71426.91 | 102057.23 | 142883.44 | 9.8538619 | 10.0088438 |
| 34 | 71406.55 | 101997.86 | 142841.04 | 9.8537381 | 10.0085911 |
| 33 | 71386.18 | 101938.53 | 142798.68 | 9.8536142 | 10.0083384 |
| 32 | 71365.81 | 101879.23 | 142756.36 | 9.8534902 | 10.0080857 |
| 31 | 71345.43 | 101819.97 | 142714.07 | 9.8533662 | 10.0078330 |
| 30 | 71325.05 | 101760.74 | 142671.82 | 9.8532421 | 10.0075803 |

# 44 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 30 | 70090.93 | 98269.73 | 140203.21 | 9.8456618 | 9.9924197 |
| 31 | 70111.67 | 98326.92 | 140243.30 | 9.8457903 | 9.9926724 |
| 32 | 70132.41 | 98384.15 | 140283.43 | 9.8459188 | 9.9929251 |
| 33 | 70153.14 | 98441.41 | 140323.60 | 9.8460471 | 9.9931778 |
| 34 | 70173.87 | 98498.71 | 140363.80 | 9.8461754 | 9.9934305 |
| 35 | 70194.59 | 98556.03 | 140404.03 | 9.8463036 | 9.9936832 |
| 36 | 70215.30 | 98613.39 | 140444.30 | 9.8464318 | 9.9939359 |
| 37 | 70236.01 | 98670.79 | 140484.60 | 9.8465599 | 9.9941886 |
| 38 | 70256.71 | 98728.21 | 140524.94 | 9.8466879 | 9.9944413 |
| 39 | 70277.41 | 98785.67 | 140565.32 | 9.8468158 | 9.9946940 |
| 40 | 70298.10 | 98843.16 | 140605.73 | 9.8469436 | 9.9949466 |
| 41 | 70318.79 | 98900.69 | 140646.17 | 9.8470714 | 9.9951993 |
| 42 | 70339.47 | 98958.25 | 140686.65 | 9.8471991 | 9.9954520 |
| 43 | 70360.14 | 99015.84 | 140727.17 | 9.8473267 | 9.9957047 |
| 44 | 70380.81 | 99073.46 | 140767.72 | 9.8474543 | 9.9959573 |
| 45 | 70401.47 | 99131.12 | 140808.31 | 9.8475817 | 9.9962100 |
| 46 | 70422.13 | 99188.81 | 140848.93 | 9.8477091 | 9.9964627 |
| 47 | 70442.78 | 99246.54 | 140889.58 | 9.8478365 | 9.9967154 |
| 48 | 70463.42 | 99304.29 | 140930.28 | 9.8479637 | 9.9969680 |
| 49 | 70484.06 | 99362.08 | 140971.00 | 9.8480909 | 9.9972207 |
| 50 | 70504.69 | 99419.91 | 141011.77 | 9.8482180 | 9.9974734 |
| 51 | 70525.32 | 99477.77 | 141052.56 | 9.8483450 | 9.9977260 |
| 52 | 70545.94 | 99535.66 | 141093.40 | 9.8484720 | 9.9979787 |
| 53 | 70566.55 | 99593.58 | 141134.27 | 9.8485989 | 9.9982314 |
| 54 | 70587.16 | 99651.54 | 141175.17 | 9.8487257 | 9.9984840 |
| 55 | 70607.76 | 99709.53 | 141216.11 | 9.8488524 | 9.9987367 |
| 56 | 70628.35 | 99767.56 | 141257.09 | 9.8489791 | 9.9989893 |
| 57 | 70648.94 | 99825.62 | 141298.10 | 9.8491057 | 9.9992420 |
| 58 | 70669.53 | 99883.71 | 141339.15 | 9.8492322 | 9.9994947 |
| 59 | 70690.11 | 99941.84 | 141380.24 | 9.8493586 | 9.9997473 |
| 60 | 70710.68 | 100000.00 | 141421.36 | 9.8494850 | 10.0000000 |

# 46 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan. |
|---|---|---|---|---|---|
| 30 | 72537.44 | 105378.01 | 145273.97 | 9.8605622 | 10.0227500 |
| 29 | 72517.41 | 105316.64 | 145229.46 | 9.8604423 | 10.0224970 |
| 28 | 72497.38 | 105255.31 | 145184.98 | 9.8603223 | 10.0222440 |
| 27 | 72477.34 | 105194.01 | 145140.55 | 9.8602022 | 10.0219910 |
| 26 | 72457.29 | 105132.75 | 145096.16 | 9.8600821 | 10.0217380 |
| 25 | 72437.24 | 105071.53 | 145051.81 | 9.8599619 | 10.0214851 |
| 24 | 72417.18 | 105010.34 | 145007.49 | 9.8598416 | 10.0212321 |
| 23 | 72397.12 | 104949.20 | 144963.22 | 9.8597213 | 10.0209791 |
| 22 | 72377.05 | 104888.09 | 144918.98 | 9.8596009 | 10.0207262 |
| 21 | 72356.98 | 104827.02 | 144874.78 | 9.8594804 | 10.0204732 |
| 20 | 72336.90 | 104765.98 | 144830.63 | 9.8593599 | 10.0202203 |
| 19 | 72316.81 | 104704.98 | 144786.51 | 9.8592393 | 10.0199674 |
| 18 | 72296.71 | 104644.02 | 144742.43 | 9.8591186 | 10.0197144 |
| 17 | 72276.61 | 104583.10 | 144698.39 | 9.8589978 | 10.0194615 |
| 16 | 72256.51 | 104522.21 | 144654.39 | 9.8588770 | 10.0192086 |
| 15 | 72236.40 | 104461.36 | 144610.43 | 9.8587561 | 10.0189557 |
| 14 | 72216.28 | 104400.55 | 144566.51 | 9.8586351 | 10.0187028 |
| 13 | 72196.15 | 104339.77 | 144522.62 | 9.8585141 | 10.0184499 |
| 12 | 72176.02 | 104279.04 | 144478.78 | 9.8583929 | 10.0181970 |
| 11 | 72155.88 | 104218.33 | 144434.97 | 9.8582718 | 10.0179441 |
| 10 | 72135.74 | 104157.67 | 144391.20 | 9.8581505 | 10.0176913 |
| 9 | 72115.59 | 104097.04 | 144347.48 | 9.8580292 | 10.0174384 |
| 8 | 72095.44 | 104036.45 | 144303.79 | 9.8579078 | 10.0171855 |
| 7 | 72075.28 | 103975.89 | 144260.13 | 9.8577863 | 10.0169327 |
| 6 | 72055.11 | 103915.37 | 144216.52 | 9.8576648 | 10.0166798 |
| 5 | 72034.94 | 103854.89 | 144172.95 | 9.8575432 | 10.0164270 |
| 4 | 72014.76 | 103794.45 | 144129.41 | 9.8574215 | 10.0161741 |
| 3 | 71994.57 | 103734.04 | 144085.91 | 9.8572998 | 10.0159213 |
| 2 | 71974.38 | 103673.67 | 144042.46 | 9.8571779 | 10.0156685 |
| 1 | 71954.18 | 103613.33 | 143999.04 | 9.8570561 | 10.0154156 |
| 0 | 71933.98 | 103553.03 | 143955.65 | 9.8569341 | 10.0151628 |

# 44 Grad.

| Minut. | Sinus | Tang. | Secans | Log.Sin. | Log.Tan |
|---|---|---|---|---|---|
| 0 | 69465.84 | 96568.88 | 139016.36 | 9.8417713 | 9.9848372 |
| 1 | 69486.76 | 96625.11 | 139055.43 | 9.8419021 | 9.9850900 |
| 2 | 69507.67 | 96681.37 | 139094.53 | 9.8420328 | 9.9853428 |
| 3 | 69528.58 | 96737.67 | 139133.66 | 9.8421634 | 9.9855956 |
| 4 | 69549.49 | 96794.00 | 139172.83 | 9.8422939 | 9.9858484 |
| 5 | 69570.39 | 96850.35 | 139212.03 | 9.8424244 | 9.9861012 |
| 6 | 69591.28 | 96906.74 | 139251.27 | 9.8425548 | 9.9863540 |
| 7 | 69612.17 | 96963.16 | 139290.54 | 9.8426851 | 9.9866068 |
| 8 | 69633.05 | 97019.62 | 139329.85 | 9.8428154 | 9.9868596 |
| 9 | 69653.92 | 97076.10 | 139369.18 | 9.8429456 | 9.9871123 |
| 10 | 69674.79 | 97132.62 | 139408.56 | 9.8430757 | 9.9873651 |
| 11 | 69695.65 | 97189.17 | 139447.96 | 9.8432057 | 9.9876179 |
| 12 | 69716.51 | 97245.75 | 139487.40 | 9.8433356 | 9.9878706 |
| 13 | 69737.36 | 97302.36 | 139526.88 | 9.8434655 | 9.9881234 |
| 14 | 69758.21 | 97359.01 | 139566.39 | 9.8435953 | 9.9883761 |
| 15 | 69779.05 | 97415.69 | 139605.93 | 9.8437250 | 9.9886289 |
| 16 | 69799.88 | 97472.40 | 139645.51 | 9.8438547 | 9.9888816 |
| 17 | 69820.71 | 97529.14 | 139685.12 | 9.8439842 | 9.9891344 |
| 18 | 69841.53 | 97585.91 | 139724.77 | 9.8441137 | 9.9893871 |
| 19 | 69862.34 | 97642.72 | 139764.45 | 9.8442432 | 9.9896399 |
| 20 | 69883.15 | 97699.56 | 139804.16 | 9.8443725 | 9.9898926 |
| 21 | 69903.96 | 97756.43 | 139843.91 | 9.8445018 | 9.9901453 |
| 22 | 69924.76 | 97813.33 | 139883.69 | 9.8446310 | 9.9903981 |
| 23 | 69945.55 | 97870.27 | 139923.51 | 9.8447601 | 9.9906508 |
| 24 | 69966.33 | 97927.24 | 139963.36 | 9.8448891 | 9.9909035 |
| 25 | 69987.11 | 97984.24 | 140003.25 | 9.8450181 | 9.9911562 |
| 26 | 70007.89 | 98041.27 | 140043.17 | 9.8451470 | 9.9914089 |
| 27 | 70028.66 | 98098.33 | 140083.13 | 9.8452758 | 9.9916616 |
| 28 | 70049.42 | 98155.43 | 140123.12 | 9.8454045 | 9.9919143 |
| 29 | 70070.18 | 98212.56 | 140163.15 | 9.8455332 | 9.9921670 |
| 30 | 70090.93 | 98269.73 | 140203.21 | 9.8456618 | 9.9924197 |

| N. | Logarith | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 601 | 2.7788745 | 634 | 2.8020893 | 667 | 2.8241258 |
| 602 | 2.7795965 | 635 | 2.8027737 | 668 | 2.8247765 |
| 603 | 9.7803173 | 636 | 2.8034571 | 669 | 2.8254261 |
| 604 | 2.7810369 | 637 | 2.8041394 | 670 | 2.8260748 |
| 605 | 2.7817554 | 638 | 2.8048207 | 671 | 2.8267225 |
| 606 | 2.7824726 | 639 | 2.8055009 | 672 | 2.8273693 |
| 607 | 2.7831887 | 640 | 2.8061800 | 673 | 2.8280151 |
| 608 | 2.7839036 | 641 | 2.8068580 | 674 | 2.8286599 |
| 609 | 2.7846173 | 642 | 2.8075350 | 675 | 2.8293038 |
| 610 | 2.7853298 | 643 | 2.8082110 | 676 | 2.8[illegible]59467 |
| 611 | 2.7860412 | 644 | 2.8088859 | 677 | 2.8305887 |
| 612 | 2.7867514 | 645 | 2.8095597 | 678 | 2.8312297 |
| 613 | 2.7874605 | 646 | 2.8102325 | 679 | 2.8318698 |
| 614 | 2.7881684 | 647 | 2.8109043 | 680 | 2.8325089 |
| 615 | 2.7888751 | 648 | 2.8115750 | 681 | 2.8331471 |
| 616 | 2.7895807 | 649 | 2.8122447 | 682 | 2.8337844 |
| 617 | 2.7902852 | 650 | 2.8129134 | 683 | 2.8344207 |
| 618 | 2.7909885 | 651 | 2.8135810 | 684 | 2.8350561 |
| 619 | 2.7916906 | 652 | 2.8142476 | 685 | 2.8356906 |
| 620 | 2.7923917 | 653 | 2.8149132 | 686 | 2.8363241 |
| 621 | 2.7930916 | 654 | 2.8155777 | 687 | 2.8369567 |
| 622 | 2.7937904 | 655 | 2.8162413 | 688 | 2.8375884 |
| 623 | 2.7944880 | 656 | 2.8169038 | 689 | 2.8382192 |
| 624 | 2.7951846 | 657 | 2.8175654 | 690 | 2.8388491 |
| 625 | 2.7958800 | 658 | 2.8182259 | 691 | 2.8394780 |
| 626 | 2.7965744 | 659 | 2.8188854 | 692 | 2.8401061 |
| 627 | 2.7972675 | 660 | 2.8195439 | 693 | 2.8407332 |
| 628 | 2.7979596 | 661 | 2.8202015 | 694 | 2.8413595 |
| 629 | 2.7986506 | 662 | 2.8208580 | 695 | 2.8419848 |
| 630 | 2.7993405 | 663 | 2.8215135 | 696 | 2.8426092 |
| 631 | 2.8000294 | 664 | 2.8221681 | 697 | 2.8432328 |
| 632 | 2.8007171 | 665 | 2.8228216 | 698 | 2.8438554 |
| 633 | 2.8014037 | 666 | 2.8234742 | 699 | 2.8444772 |
| 634 | 2.8020893 | 667 | 2.8241258 | 700 | 2.8450980 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 701 | 2.8457180 | 734 | 2.8656961 | 767 | 2.8847954 |
| 702 | 2.8463371 | 735 | 2.8662873 | 768 | 2.8853612 |
| 703 | 2.8469553 | 736 | 2.8668778 | 769 | 2.8859263 |
| 704 | 2.8475727 | 737 | 2.8674675 | 770 | 2.8864907 |
| 705 | 2.8481891 | 738 | 2.8680564 | 771 | 2.8870544 |
| 706 | 2.8488047 | 739 | 2.8686444 | 772 | 2.8876173 |
| 707 | 2.8494194 | 740 | 2.8692317 | 773 | 2.8881795 |
| 708 | 2.8500333 | 741 | 2.8698182 | 774 | 2.8887410 |
| 709 | 2.8506462 | 742 | 2.8704039 | 775 | 2.8893017 |
| 710 | 2.8512583 | 743 | 2.8709888 | 776 | 2.8898617 |
| 711 | 2.8518696 | 744 | 2.8715729 | 777 | 2.8904210 |
| 712 | 2.8524800 | 745 | 2.8721563 | 778 | 2.8909796 |
| 713 | 2.8530895 | 746 | 2.8727388 | 779 | 2.8915375 |
| 714 | 2.8536982 | 747 | 2.8733206 | 780 | 2.8920946 |
| 715 | 2.8543060 | 748 | 2.8739016 | 781 | 2.8926510 |
| 716 | 2.8549130 | 749 | 2.8744818 | 782 | 2.8932067 |
| 717 | 2.8555191 | 750 | 2.8750613 | 783 | 2.8937618 |
| 718 | 2.8561244 | 751 | 2.8756399 | 784 | 2.8943161 |
| 719 | 2.8567289 | 752 | 2.8762178 | 785 | 2.8948696 |
| 720 | 2.8573325 | 753 | 2.8767950 | 786 | 2.8954225 |
| 721 | 2.8579353 | 754 | 2.8773713 | 787 | 2.8959747 |
| 722 | 2.8585372 | 755 | 2.8779469 | 788 | 2.8965262 |
| 723 | 2.8591383 | 756 | 2.8785218 | 789 | 2.8970770 |
| 724 | 2.8597386 | 757 | 2.8790959 | 790 | 2.8976271 |
| 725 | 2.8603380 | 758 | 2.8796692 | 791 | 2.8981765 |
| 726 | 2.8609366 | 759 | 2.8802418 | 792 | 2.8987252 |
| 727 | 2.8615344 | 760 | 2.8808136 | 793 | 2.8992732 |
| 728 | 2.8621314 | 761 | 2.8813847 | 794 | 2.8998205 |
| 729 | 2.8627275 | 762 | 2.8819550 | 795 | 2.9003671 |
| 730 | 2.8633229 | 763 | 2.8825245 | 796 | 2.9009131 |
| 731 | 2.8639174 | 764 | 2.8830934 | 797 | 2.9014583 |
| 732 | 2.8645111 | 765 | 2.8836614 | 798 | 2.9020029 |
| 733 | 2.8651040 | 766 | 2.8842288 | 799 | 2.9025468 |
| 734 | 2.8656961 | 767 | 2.8847954 | 800 | 2.9030900 |

| *N.* | *Logarith* | *N.* | *Logarit.* | *N.* | *Logarit.* |
|---|---|---|---|---|---|
| 401 | 2.6031444 | 434 | 2.6374897 | 467 | 2.6693169 |
| 402 | 2.6042260 | 435 | 2.6384893 | 468 | 2.6702458 |
| 403 | 2.6053050 | 436 | 2.6394865 | 469 | 2.6711728 |
| 404 | 2.6063814 | 437 | 2.6404814 | 470 | 2.6720979 |
| 405 | 2.6074550 | 438 | 2.6414741 | 471 | 2.6730209 |
| 406 | 2.6085260 | 439 | 2.6424645 | 472 | 2.6739420 |
| 407 | 2.6095944 | 440 | 2.6434527 | 473 | 2.6748611 |
| 408 | 2.6106602 | 441 | 2.6444386 | 474 | 2.6757783 |
| 409 | 2.6117233 | 442 | 2.6454223 | 475 | 2.6766936 |
| 410 | 2.6127839 | 443 | 2.6464037 | 476 | 2.6776069 |
| 411 | 2.6138418 | 444 | 2.6473830 | 477 | 2.6785184 |
| 412 | 2.6148972 | 445 | 2.6483600 | 478 | 2.6794279 |
| 413 | 2.6159500 | 446 | 2.6493349 | 479 | 2.6803355 |
| 414 | 2.6170003 | 447 | 2.6503075 | 480 | 2.6812412 |
| 415 | 2.6180481 | 448 | 2.6512780 | 481 | 2.6821451 |
| 416 | 2.6190933 | 449 | 2.6522463 | 482 | 2.6830470 |
| 417 | 2.6201360 | 450 | 2.6532125 | 483 | 2.6839471 |
| 418 | 2.6211763 | 451 | 2.6541765 | 484 | 2.6848454 |
| 419 | 2.6222140 | 452 | 2.6551384 | 485 | 2.6857417 |
| 420 | 2.6232493 | 453 | 2.6560982 | 486 | 2.6866363 |
| 421 | 2.6242821 | 454 | 2.6570558 | 487 | 2.6875290 |
| 422 | 2.6253124 | 455 | 2.6580114 | 488 | 2.6884198 |
| 423 | 2.6263404 | 456 | 2.6589648 | 489 | 2.6893089 |
| 424 | 2.6273659 | 457 | 2.6599162 | 490 | 2.6901961 |
| 425 | 2.6283889 | 458 | 2.6608655 | 491 | 2.6910815 |
| 426 | 2.6294096 | 459 | 2.6618127 | 492 | 2.6919651 |
| 427 | 2.6304279 | 460 | 2.6627578 | 493 | 2.6928469 |
| 428 | 2.6314438 | 461 | 2.6637009 | 494 | 2.6937269 |
| 429 | 2.6324573 | 462 | 2.6646420 | 495 | 2.6946052 |
| 430 | 2.6334685 | 463 | 2.6655810 | 496 | 2.6954817 |
| 431 | 2.6344773 | 464 | 2.6665180 | 497 | 2.6963564 |
| 432 | 2.6354837 | 465 | 2.6674529 | 498 | 2.6972293 |
| 433 | 2.6364879 | 466 | 2.6683859 | 499 | 2.6981005 |
| 434 | 2.6374897 | 467 | 2.6693169 | 500 | 2.6989700 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 501 | 2.6998377 | 534 | 2.7275413 | 567 | 2.7535831 |
| 502 | 2.7007037 | 535 | 2.7283538 | 568 | 2.7543483 |
| 503 | 2.7015680 | 536 | 2.7291648 | 569 | 2.7551123 |
| 504 | 2.7024305 | 537 | 2.7299743 | 570 | 2.7558748 |
| 505 | 2.7032914 | 538 | 2.7307823 | 571 | 2.7566361 |
| 506 | 2.7041505 | 539 | 2.7315888 | 572 | 2.7573960 |
| 507 | 2.7050080 | 540 | 2.7323938 | 573 | 2.7581546 |
| 508 | 2.7058637 | 541 | 2.7331973 | 574 | 2.7589119 |
| 509 | 2.7067178 | 542 | 2.7339993 | 575 | 2.7596678 |
| 510 | 2.7075702 | 543 | 2.7347998 | 576 | 2.7604225 |
| 511 | 2.7084209 | 544 | 2.7355989 | 577 | 2.7611758 |
| 512 | 2.7092700 | 545 | 2.7363965 | 578 | 2.7619278 |
| 513 | 2.7101174 | 546 | 2.7371926 | 579 | 2.7626786 |
| 514 | 2.7109631 | 547 | 2.7379873 | 580 | 2.7634280 |
| 515 | 2.7118072 | 548 | 2.7387806 | 581 | 2.7641761 |
| 516 | 2.7126497 | 549 | 2.7395723 | 582 | 2.7649230 |
| 517 | 2.7134905 | 550 | 2.7403627 | 583 | 2.7656685 |
| 518 | 2.7143298 | 551 | 2.7411516 | 584 | 2.7664128 |
| 519 | 2.7151674 | 552 | 2.7419391 | 585 | 2.7671559 |
| 520 | 2.7160033 | 553 | 2.7427251 | 586 | 2.7678976 |
| 521 | 2.7168377 | 554 | 2.7435098 | 587 | 2.7686381 |
| 522 | 2.7176705 | 555 | 2.7442930 | 588 | 2.7693773 |
| 523 | 2.7185017 | 556 | 2.7450748 | 589 | 2.7701153 |
| 524 | 2.7193313 | 557 | 2.7458552 | 590 | 2.7708520 |
| 525 | 2.7201593 | 558 | 2.7466342 | 591 | 2.7715875 |
| 526 | 2.7209857 | 559 | 2.7474118 | 592 | 2.7723217 |
| 527 | 2.7218106 | 560 | 2.7481880 | 593 | 2.7730547 |
| 528 | 2.7226339 | 561 | 2.7489629 | 594 | 2.7737864 |
| 529 | 2.7234557 | 562 | 2.7497363 | 595 | 2.7745170 |
| 530 | 2.7242759 | 563 | 2.7505084 | 596 | 2.7752463 |
| 531 | 2.7250945 | 564 | 2.7512791 | 597 | 2.7759743 |
| 532 | 2.7259116 | 565 | 2.7520484 | 598 | 2.7767012 |
| 533 | 2.7267272 | 566 | 2.7528164 | 599 | 2.7774268 |
| 534 | 2.7275413 | 567 | 2.7535831 | 600 | 2.7781512 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 201 | 2.3031961 | 234 | 2.3692159 | 267 | 2.4265113 |
| 202 | 2.3053514 | 235 | 2.3710679 | 268 | 2.4281348 |
| 203 | 2.3074960 | 236 | 2.3729120 | 269 | 2.4297523 |
| 204 | 2.3096302 | 237 | 2.3747483 | 270 | 2.4313638 |
| 205 | 2.3117539 | 238 | 2.3765769 | 271 | 2.4329693 |
| 206 | 2.3138672 | 239 | 2.3783979 | 272 | 2.4345689 |
| 207 | 2.3159703 | 240 | 2.3802112 | 273 | 2.4361626 |
| 208 | 2.3180633 | 241 | 2.3820170 | 274 | 2.4377506 |
| 209 | 2.3201463 | 242 | 2.3838154 | 275 | 2.4393327 |
| 210 | 2.3222193 | 243 | 2.3856063 | 276 | 2.4409091 |
| 211 | 2.3242824 | 244 | 2.3873898 | 277 | 2.4424798 |
| 212 | 2.3263359 | 245 | 2.3891661 | 278 | 2.4440448 |
| 213 | 2.3283796 | 246 | 2.3909351 | 279 | 2.4456042 |
| 214 | 2.3304138 | 247 | 2.3926969 | 280 | 2.4471580 |
| 215 | 2.3324385 | 248 | 2.3944517 | 281 | 2.4487063 |
| 216 | 2.3344537 | 249 | 2.3961993 | 282 | 2.4502491 |
| 217 | 2.3364597 | 250 | 2.3979400 | 283 | 2.4517864 |
| 218 | 2.3384565 | 251 | 2.3996737 | 284 | 2.4533183 |
| 219 | 2.3404441 | 252 | 2.4014005 | 285 | 2.4548449 |
| 220 | 2.3424227 | 253 | 2.4031205 | 286 | 2.4563660 |
| 221 | 2.3443923 | 254 | 2.4048337 | 287 | 2.4578819 |
| 222 | 2.3463530 | 255 | 2.4065402 | 288 | 2.4593925 |
| 223 | 2.3483049 | 256 | 2.4082400 | 289 | 2.4608978 |
| 224 | 2.3502480 | 257 | 2.4099331 | 290 | 2.4623980 |
| 225 | 2.3521825 | 258 | 2.4116197 | 291 | 2.4638930 |
| 226 | 2.3541084 | 259 | 2.4132998 | 292 | 2.4653828 |
| 227 | 2.3560259 | 260 | 2.4149733 | 293 | 2.4668676 |
| 228 | 2.3579348 | 261 | 2.4166405 | 294 | 2.4683473 |
| 229 | 2.3598355 | 262 | 2.4183013 | 295 | 2.4698220 |
| 230 | 2.3617278 | 263 | 2.4199557 | 295 | 2.4712917 |
| 231 | 2.3636120 | 264 | 2.4216039 | 297 | 2.4727564 |
| 232 | 2.3654880 | 265 | 2.4232459 | 298 | 2.4742163 |
| 233 | 2.3673559 | 266 | 2.4248816 | 299 | 2.4756712 |
| 234 | 2.3692159 | 267 | 2.4265113 | 300 | 2.4771212 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 301 | 2.4785665 | 334 | 2.5237465 | 367 | 2.5646661 |
| 302 | 2.4800069 | 335 | 2.5250448 | 368 | 2.5658478 |
| 303 | 2.4814426 | 336 | 2.5263393 | 369 | 2.5670264 |
| 304 | 2.4828736 | 337 | 2.5276299 | 370 | 2.5682017 |
| 305 | 2.4842998 | 338 | 2.5289167 | 371 | 2.5693739 |
| 306 | 2.4857214 | 339 | 2.5301997 | 372 | 2.5705429 |
| 307 | 2.4871384 | 340 | 2.5314789 | 373 | 2.5717088 |
| 308 | 2.4885507 | 341 | 2.5327544 | 374 | 2.5728716 |
| 309 | 2.4899585 | 342 | 2.5340261 | 375 | 2.5740313 |
| 310 | 2.4913617 | 343 | 2.5352941 | 376 | 2.5751878 |
| 311 | 2.4927604 | 344 | 2.5365584 | 377 | 2.5763413 |
| 312 | 2.4941546 | 345 | 2.5378191 | 378 | 2.5774918 |
| 313 | 2.4955443 | 346 | 2.5390761 | 379 | 2.5786392 |
| 314 | 2.4969296 | 347 | 2.5403295 | 380 | 2.5797836 |
| 315 | 2.4983105 | 348 | 2.5415792 | 381 | 2.5809250 |
| 316 | 2.4996871 | 349 | 2.5428254 | 382 | 2.5820634 |
| 317 | 2.5010593 | 350 | 2.5440680 | 383 | 2.5831988 |
| 318 | 2.5024271 | 351 | 2.5453071 | 384 | 2.5843312 |
| 319 | 2.5037907 | 352 | 2.5465427 | 385 | 2.5854607 |
| 320 | 2.5051500 | 353 | 2.5477747 | 386 | 2.5865873 |
| 321 | 2.5065050 | 354 | 2.5490033 | 387 | 2.5877110 |
| 322 | 2.5078559 | 355 | 2.5502283 | 388 | 2.5888317 |
| 323 | 2.5092025 | 356 | 2.5514500 | 389 | 2.5899496 |
| 324 | 2.5105450 | 357 | 2.5526682 | 390 | 2.5910646 |
| 325 | 2.5118834 | 358 | 2.5538830 | 391 | 2.5921768 |
| 326 | 2.5132176 | 359 | 2.5550944 | 392 | 2.5932861 |
| 327 | 2.5145477 | 360 | 2.5563025 | 393 | 2.5943925 |
| 328 | 2.5158738 | 361 | 2.5575072 | 394 | 2.5954962 |
| 329 | 2.5171959 | 362 | 2.5587086 | 395 | 2.5965971 |
| 330 | 2.5185139 | 363 | 2.5599066 | 396 | 2.5976952 |
| 331 | 2.5198280 | 364 | 2.5611014 | 397 | 2.5987905 |
| 332 | 2.5211381 | 365 | 2.5622929 | 398 | 2.5998831 |
| 333 | 2.5224442 | 366 | 2.5634811 | 399 | 2.6009729 |
| 334 | 2.5237465 | 367 | 2.5646661 | 400 | 2.6020600 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 1 | 0.0000000 | 34 | 1.5314789 | 67 | 1.8260748 |
| 2 | 0.3010300 | 35 | 1.5440680 | 68 | 1.8325089 |
| 3 | 0.4771212 | 36 | 1.5563025 | 69 | 1.8388491 |
| 4 | 0.6020600 | 37 | 1.5682017 | 70 | 1.8450980 |
| 5 | 0.6989700 | 38 | 1.5797836 | 71 | 1.8512583 |
| 6 | 0.7781512 | 39 | 1.5910646 | 72 | 1.8573325 |
| 7 | 0.8450980 | 40 | 1.6020600 | 73 | 1.8633229 |
| 8 | 0.9030900 | 41 | 1.6127839 | 74 | 1.8692317 |
| 9 | 0.9542425 | 42 | 1.6232493 | 75 | 1.8750613 |
| 10 | 1.0000000 | 43 | 1.6334685 | 76 | 1.8808136 |
| 11 | 1.0413927 | 44 | 1.6434527 | 77 | 1.8864907 |
| 12 | 1.0791812 | 45 | 1.6532125 | 78 | 1.8920946 |
| 13 | 1.1139433 | 46 | 1.6627578 | 79 | 1.8976271 |
| 14 | 1.1461280 | 47 | 1.6720979 | 80 | 1.9030900 |
| 15 | 1.1760913 | 48 | 1.6812412 | 81 | 1.9084850 |
| 16 | 1.2041200 | 49 | 1.6901961 | 82 | 1.9138138 |
| 17 | 1.2304489 | 50 | 1.6989700 | 83 | 1.9190781 |
| 18 | 1.2552725 | 51 | 1.7075702 | 84 | 1.9242793 |
| 19 | 1.2787536 | 52 | 1.7160033 | 85 | 1.9294189 |
| 20 | 1.3010300 | 53 | 1.7242759 | 86 | 1.9344984 |
| 21 | 1.3222193 | 54 | 1.7323938 | 87 | 1.9395192 |
| 22 | 1.3424227 | 55 | 1.7403627 | 88 | 1.9444827 |
| 23 | 1.3617278 | 56 | 1.7481880 | 89 | 1.9493900 |
| 24 | 1.3802112 | 57 | 1.7558748 | 90 | 1.9542425 |
| 25 | 1.3979400 | 58 | 1.7634280 | 91 | 1.9590414 |
| 26 | 1.4149733 | 59 | 1.7708520 | 92 | 1.9637878 |
| 27 | 1.4313638 | 60 | 1.7781512 | 93 | 1.9684829 |
| 28 | 1.4471580 | 61 | 1.7853298 | 94 | 1.9731278 |
| 29 | 1.4623980 | 62 | 1.7923917 | 95 | 1.9777236 |
| 30 | 1.4771212 | 63 | 1.7993405 | 96 | 1.9822712 |
| 31 | 1.4913617 | 64 | 1.8061800 | 97 | 1.9867717 |
| 32 | 1.5051500 | 65 | 1.8129133 | 98 | 1.9912261 |
| 33 | 1.5185139 | 66 | 1.8195439 | 99 | 1.9956352 |
| 34 | 1.5314789 | 67 | 1.8260748 | 100 | 2.0000000 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 101 | 2.0043214 | 134 | 2.1271048 | 167 | 2.2227165 |
| 102 | 2.0086002 | 135 | 2.1303338 | 168 | 2.2253093 |
| 103 | 2.0128372 | 136 | 2.1335389 | 169 | 2.2278867 |
| 104 | 2.0170333 | 137 | 2.1367206 | 170 | 2.2304489 |
| 105 | 2.0211893 | 138 | 2.1398791 | 171 | 2.2329961 |
| 106 | 2.0253059 | 139 | 2.1430148 | 172 | 2.2355284 |
| 107 | 2.0293838 | 140 | 2.1461280 | 173 | 2.2380461 |
| 108 | 2.0334238 | 141 | 2.1492191 | 174 | 2.2405492 |
| 109 | 2.0374265 | 142 | 2.1522883 | 175 | 2.2430380 |
| 110 | 2.0413927 | 143 | 2.1553360 | 176 | 2.2455127 |
| 111 | 2.0453230 | 144 | 2.1583625 | 177 | 2.2479733 |
| 112 | 2.0492180 | 145 | 2.1613680 | 178 | 2.2504200 |
| 113 | 2.0530784 | 146 | 2.1643528 | 179 | 2.2528530 |
| 114 | 2.0569049 | 147 | 2.1673173 | 180 | 2.2552725 |
| 115 | 2.0606978 | 148 | 2.1702617 | 181 | 2.2576786 |
| 116 | 2.0644580 | 149 | 2.1731863 | 182 | 2.2600714 |
| 117 | 2.0681859 | 150 | 2.1760913 | 183 | 2.2624511 |
| 118 | 2.0718820 | 151 | 2.1789769 | 184 | 2.2648178 |
| 119 | 2.0755470 | 152 | 2.1818436 | 185 | 2.2671717 |
| 120 | 2.0791812 | 153 | 2.1846914 | 186 | 2.2695129 |
| 121 | 2.0827854 | 154 | 2.1875207 | 187 | 2.2718416 |
| 122 | 2.0863598 | 155 | 2.1903317 | 188 | 2.2741578 |
| 123 | 2.0899051 | 156 | 2.1931246 | 189 | 2.2764618 |
| 124 | 2.0934217 | 157 | 2.1958996 | 190 | 2.2787536 |
| 125 | 2.0969100 | 158 | 2.1986571 | 191 | 2.2810334 |
| 126 | 2.1003705 | 159 | 2.2013971 | 192 | 2.2833012 |
| 127 | 2.1038037 | 160 | 2.2041200 | 193 | 2.2855573 |
| 128 | 2.1072100 | 161 | 2.2068259 | 194 | 2.2878017 |
| 129 | 2.1105897 | 162 | 2.2095150 | 195 | 2.2900346 |
| 130 | 2.1139433 | 163 | 2.2121876 | 196 | 2.2922561 |
| 131 | 2.1172713 | 164 | 2.2148438 | 197 | 2.2944662 |
| 132 | 2.1205739 | 165 | 2.2174839 | 198 | 2.2966652 |
| 133 | 2.1238516 | 166 | 2.2201081 | 199 | 2.2988531 |
| 134 | 2.1271048 | 167 | 2.2227165 | 200 | 2.3010300 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 801 | 2.9036325 | 834 | 2.9211660 | 867 | 2.9380191 |
| 802 | 2.9041744 | 835 | 2.9216865 | 868 | 2.9385197 |
| 803 | 2.9047155 | 836 | 2.9222063 | 869 | 2.9390198 |
| 804 | 2.9052560 | 837 | 2.9227254 | 870 | 2.9395192 |
| 805 | 2.9057959 | 838 | 2.9232440 | 871 | 2.9400181 |
| 806 | 2.9063350 | 839 | 2.9237620 | 872 | 2.9405165 |
| 807 | 2.9068735 | 840 | 2.9242793 | 873 | 2.9410142 |
| 808 | 2.9074114 | 841 | 2.9247960 | 874 | 2.9415114 |
| 809 | 2.9079485 | 842 | 2.9253121 | 875 | 2.9420080 |
| 810 | 2.9084850 | 843 | 2.9258276 | 876 | 2.9425041 |
| 811 | 2.9090208 | 844 | 2.9263424 | 877 | 2.9429996 |
| 812 | 2.9095560 | 845 | 2.9268567 | 878 | 2.9434945 |
| 813 | 2.9100905 | 846 | 2.9273704 | 879 | 2.9439889 |
| 814 | 2.9106244 | 847 | 2.9278834 | 880 | 2.9444827 |
| 815 | 2.9111576 | 848 | 2.9283958 | 881 | 2.9449759 |
| 816 | 2.9116901 | 849 | 2.9289077 | 882 | 2.9454686 |
| 817 | 2.9122220 | 850 | 2.9294189 | 883 | 2.9459607 |
| 818 | 2.9127533 | 851 | 2.9299296 | 884 | 2.9464523 |
| 819 | 2.9132839 | 852 | 2.9304396 | 885 | 2.9469433 |
| 820 | 2.9138138 | 853 | 2.9309490 | 886 | 2.9474337 |
| 821 | 2.9143431 | 854 | 2.9314579 | 887 | 2.9479236 |
| 822 | 2.9148718 | 855 | 2.9319661 | 888 | 2.9484130 |
| 823 | 2.9153998 | 856 | 2.9324738 | 889 | 2.9489018 |
| 824 | 2.9159272 | 857 | 2.9329808 | 890 | 2.9493900 |
| 825 | 2.9164539 | 858 | 2.9334873 | 891 | 2.9498777 |
| 826 | 2.9169800 | 859 | 2.9339932 | 892 | 2.9503648 |
| 827 | 2.9175055 | 860 | 2.9344984 | 893 | 2.9508514 |
| 828 | 2.9180303 | 861 | 2.9350031 | 894 | 2.9513375 |
| 829 | 2.9185545 | 862 | 2.9355073 | 895 | 2.9518230 |
| 830 | 2.9190781 | 863 | 2.9360108 | 896 | 2.9523080 |
| 831 | 2.9196010 | 864 | 2.9365137 | 897 | 2.9527924 |
| 832 | 2.9201233 | 865 | 2.9370161 | 898 | 2.9532763 |
| 833 | 2.9206450 | 866 | 2.9375179 | 899 | 2.9537597 |
| 834 | 2.9211660 | 867 | 2.9380191 | 900 | 2.9542425 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 901 | 2.9547248 | 934 | 2.9703469 | 967 | 2.9854265 |
| 902 | 2.9552065 | 935 | 2.9708116 | 968 | 2.9858754 |
| 903 | 2.9556877 | 936 | 2.9712758 | 969 | 2.9863238 |
| 904 | 2.9561684 | 937 | 2.9717396 | 970 | 2.9867717 |
| 905 | 2.9566486 | 938 | 2.9722028 | 971 | 2.9872192 |
| 906 | 2.9571282 | 939 | 2.9726656 | 972 | 2.9876663 |
| 907 | 2.9576073 | 940 | 2.9731278 | 973 | 2.9881128 |
| 908 | 2.9580858 | 941 | 2.9735896 | 974 | 2.9885589 |
| 909 | 2.9585639 | 942 | 2.9740509 | 975 | 2.9890046 |
| 910 | 2.9590414 | 943 | 2.9745117 | 976 | 2.9894498 |
| 911 | 2.9595184 | 944 | 2.9749720 | 977 | 2.9898946 |
| 912 | 2.9599948 | 945 | 2.9754318 | 978 | 2.9903388 |
| 913 | 2.9604708 | 946 | 2.9758911 | 979 | 2.9907827 |
| 914 | 2.9609462 | 947 | 2.9763500 | 980 | 2.9912261 |
| 915 | 2.9614211 | 948 | 2.9768083 | 981 | 2.9916690 |
| 916 | 2.9618955 | 949 | 2.9772662 | 982 | 2.9921115 |
| 917 | 2.9623693 | 950 | 2.9777236 | 983 | 2.9925535 |
| 918 | 2.9628427 | 951 | 2.9781805 | 984 | 2.9929951 |
| 919 | 2.9633155 | 952 | 2.9786369 | 985 | 2.9934362 |
| 920 | 2.9637878 | 953 | 2.9790929 | 986 | 2.9938769 |
| 921 | 2.9642596 | 954 | 2.9795484 | 987 | 2.9943171 |
| 922 | 2.9647309 | 955 | 2.9800034 | 988 | 2.9947569 |
| 923 | 2.9652017 | 956 | 2.9804579 | 989 | 2.9951963 |
| 924 | 2.9656720 | 957 | 2.9809119 | 990 | 2.9956352 |
| 925 | 2.9661417 | 958 | 2.9813655 | 991 | 2.9960736 |
| 926 | 2.9666110 | 959 | 2.9818186 | 992 | 2.9965117 |
| 927 | 2.9670797 | 960 | 2.9822712 | 993 | 2.9969492 |
| 928 | 2.9675480 | 961 | 2.9827234 | 994 | 2.9973864 |
| 929 | 2.9680157 | 962 | 2.9831751 | 995 | 2.9978231 |
| 930 | 2.9684829 | 963 | 2.9836263 | 996 | 2.9982593 |
| 931 | 2.9689497 | 964 | 2.9840770 | 997 | 2.9986951 |
| 932 | 2.9694 59 | 965 | 2.9845273 | 998 | 2.9991305 |
| 923 | 2.9698816 | 966 | 2.9849771 | 999 | 2.9995655 |
| 934 | 2.9705469 | 967 | 2.9854265 | 1000 | 3.0000000 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1001 | 3.0004341 | 1034 | 3.0145205 | 1067 | 3.0281644 |
| 1002 | 3.0008677 | 1035 | 3.0149403 | 1068 | 3.0285712 |
| 1003 | 3.0013009 | 1036 | 3.0153597 | 1069 | 3.0289777 |
| 1004 | 3.0017337 | 1037 | 3.0157787 | 1070 | 3.0293838 |
| 1005 | 3.0021661 | 1038 | 3.0161973 | 1071 | 3.0297895 |
| 1006 | 3.0025980 | 1039 | 3.0166155 | 1072 | 3.0301948 |
| 1007 | 3.0030295 | 1040 | 3.0170333 | 1073 | 3.0305997 |
| 1008 | 3.0034605 | 1041 | 3.0174507 | 1074 | 3.0310043 |
| 1009 | 3.0038912 | 1042 | 3.0178677 | 1075 | 3.0314085 |
| 1010 | 3.0043214 | 1043 | 3.0182843 | 1076 | 3.0318123 |
| 1011 | 3.0047511 | 1044 | 3.0187005 | 1077 | 3.0322157 |
| 1012 | 3.0051805 | 1045 | 3.0191163 | 1078 | 3.0326188 |
| 1013 | 3.0056094 | 1046 | 3.0195317 | 1079 | 3.0330214 |
| 1014 | 3.0060379 | 1047 | 3.0199467 | 1080 | 3.0334237 |
| 1015 | 3.0064660 | 1048 | 3.0203613 | 1081 | 3.0338257 |
| 1016 | 3.0068937 | 1049 | 3.0207755 | 1082 | 3.0342273 |
| 1017 | 3.0073209 | 1050 | 3.0211893 | 1083 | 3.0346284 |
| 1018 | 3.0077478 | 1051 | 3.0216027 | 1084 | 3.0350293 |
| 1019 | 3.0081742 | 1052 | 3.0220157 | 1085 | 3.0354297 |
| 1020 | 3.0086002 | 1053 | 3.0224284 | 1086 | 3.0358298 |
| 1021 | 3.0090257 | 1054 | 3.0228406 | 1087 | 3.0362295 |
| 1022 | 3.0094509 | 1055 | 3.0232524 | 1088 | 3.0366289 |
| 1023 | 3.0098756 | 1056 | 3.0236639 | 1089 | 3.0370279 |
| 1024 | 3.0102999 | 1057 | 3.0240750 | 1090 | 3.0374265 |
| 1025 | 3.0107239 | 1058 | 3.0244857 | 1091 | 3.0378247 |
| 1026 | 3.0111474 | 1059 | 3.0248960 | 1092 | 3.0382226 |
| 1027 | 3.0115704 | 1060 | 3.0253059 | 1093 | 3.0386201 |
| 1028 | 3.0119931 | 1061 | 3.0257154 | 1094 | 3.0390173 |
| 1029 | 3.0124154 | 1062 | 3.0261245 | 1095 | 3.0394141 |
| 1030 | 3.0128372 | 1063 | 3.0265333 | 1096 | 3.0398105 |
| 1031 | 3.0132587 | 1064 | 3.0269416 | 1097 | 3.0402066 |
| 1032 | 3.0136797 | 1065 | 3.0273496 | 1098 | 3.0406023 |
| 1033 | 3.0141003 | 1066 | 3.0277572 | 1099 | 3.0409977 |
| 1034 | 3.0145205 | 1067 | 3.0281644 | 1100 | 3.0413927 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1101 | 3.0417873 | 1134 | 3.0546130 | 1167 | 3.0670708 |
| 1102 | 3.0421816 | 1135 | 3.0549958 | 1168 | 3.0674428 |
| 1103 | 3.0425755 | 1136 | 3.0553783 | 1169 | 3.0678145 |
| 1104 | 3.0429691 | 1137 | 3.0557604 | 1170 | 3.0681859 |
| 1105 | 3.0433623 | 1138 | 3.0561423 | 1171 | 3.0685569 |
| 1106 | 3.0437551 | 1139 | 3.0565237 | 1172 | 3.0689276 |
| 1107 | 3.0441476 | 1140 | 3.0569048 | 1173 | 3.0692980 |
| 1108 | 3.0445398 | 1141 | 3.0572856 | 1174 | 3.0696681 |
| 1109 | 3.0449315 | 1142 | 3.0576661 | 1175 | 3.0700379 |
| 1110 | 3.0453230 | 1143 | 3.0580462 | 1176 | 3.0704073 |
| 1111 | 3.0457140 | 1144 | 3.0584260 | 1177 | 3.0707765 |
| 1112 | 2.0461048 | 1145 | 3.0588055 | 1178 | 3.0711453 |
| 1113 | 3.0464952 | 1146 | 3.0591846 | 1179 | 3.0715138 |
| 1114 | 3.0468852 | 1147 | 3.0595634 | 1180 | 3.0718820 |
| 1115 | 3.0472749 | 1148 | 3.0599419 | 1181 | 3.0722499 |
| 1116 | 3.0476642 | 1149 | 3.0603200 | 1182 | 3.0726175 |
| 1117 | 3.0480532 | 1150 | 3.0606978 | 1183 | 3.0729847 |
| 1118 | 3.0484418 | 1151 | 3.0610753 | 1184 | 3.0733517 |
| 1119 | 3.0488301 | 1152 | 3.0614525 | 1185 | 3.0737183 |
| 1120 | 3.0492180 | 1153 | 3.0618293 | 1186 | 3.0740847 |
| 1121 | 3.0496056 | 1154 | 3.0622058 | 1187 | 3.0744507 |
| 1122 | 3.0499928 | 1155 | 3.0625820 | 1188 | 3.0748164 |
| 1123 | 3.0503797 | 1156 | 3.0629578 | 1189 | 3.0751818 |
| 1124 | 3.0507663 | 1157 | 3.0633334 | 1190 | 3.0755470 |
| 1125 | 3.0511525 | 1158 | 3.0637085 | 1191 | 3.0759118 |
| 1126 | 3.0515384 | 1159 | 3.0640834 | 1192 | 3.0762762 |
| 1127 | 3.0519239 | 1160 | 3.0644580 | 1193 | 3.0766404 |
| 1128 | 3.0523091 | 1161 | 3.0648322 | 1194 | 3.0770043 |
| 1129 | 3.0526939 | 1162 | 3.0652061 | 1195 | 3.0773679 |
| 1130 | 3.0530784 | 1163 | 3.0655797 | 1196 | 3.0777312 |
| 1131 | 3.0534626 | 1164 | 3.0659530 | 1197 | 3.0780941 |
| 1132 | 3.0538464 | 1165 | 3.0663259 | 1198 | 3.0784568 |
| 1133 | 3.0542299 | 1166 | 3.0666985 | 1199 | 3.0788192 |
| 1134 | 3.0546130 | 1167 | 3.0670708 | 1200 | 3.0791812 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1201 | 3.0795430 | 1234 | 3.0913151 | 1267 | 3.1027766 |
| 1202 | 3.0799045 | 1235 | 3.0916669 | 1268 | 3.1031192 |
| 1203 | 3.0802656 | 1236 | 3.0920185 | 1269 | 3.1034616 |
| 1204 | 3.0806265 | 1237 | 3.0923697 | 1270 | 3.1038037 |
| 1205 | 3.0809870 | 1238 | 3.0927206 | 1271 | 3.1041455 |
| 1206 | 3.0813473 | 1239 | 3.0930713 | 1272 | 3.1044871 |
| 1207 | 3.0817073 | 1240 | 3.0934217 | 1273 | 3.1048284 |
| 1208 | 3.0820669 | 1241 | 3.0937718 | 1274 | 3.1051694 |
| 1209 | 3.0824263 | 1242 | 3.0941216 | 1275 | 3.1055102 |
| 1210 | 3.0827854 | 1243 | 3.0944711 | 1276 | 3.1058507 |
| 1211 | 3.0831441 | 1244 | 3.0948204 | 1277 | 3.1061909 |
| 1212 | 3.0835026 | 1245 | 3.0951693 | 1278 | 3.1065308 |
| 1213 | 3.0838608 | 1246 | 3.0955180 | 1279 | 3.1068705 |
| 1214 | 3.0842187 | 1247 | 3.0958664 | 1280 | 3.1072100 |
| 1215 | 3.0845763 | 1248 | 3.0962146 | 1281 | 3.1075491 |
| 1216 | 3.0849335 | 1249 | 3.0965624 | 1282 | 3.1078880 |
| 1217 | 3.0852906 | 1250 | 3.0969100 | 1283 | 3.1082266 |
| 1218 | 3.0856473 | 1251 | 3.0972573 | 1284 | 3.1085650 |
| 1219 | 3.0860037 | 1252 | 3.0976043 | 1285 | 3.1089031 |
| 1220 | 3.0863598 | 1253 | 3.0979511 | 1286 | 3.1092410 |
| 1221 | 3.0867156 | 1254 | 3.0982975 | 1287 | 3.1095785 |
| 1222 | 3.0870712 | 1255 | 3.0986437 | 1288 | 3.1099159 |
| 1223 | 3.0874264 | 1256 | 3.0989896 | 1289 | 3.1102529 |
| 1224 | 3.0877814 | 1257 | 3.0993353 | 1290 | 3.1105897 |
| 1225 | 3.0881361 | 1258 | 3.0996806 | 1291 | 3.1109262 |
| 1226 | 3.0884905 | 1259 | 3.1000257 | 1292 | 3.1112625 |
| 1227 | 3.0888446 | 1260 | 3.1003705 | 1293 | 3.1115985 |
| 1228 | 3.0891984 | 1261 | 3.1007151 | 1294 | 3.1119343 |
| 1229 | 3.0895519 | 1262 | 3.1010593 | 1295 | 3.1122698 |
| 1230 | 3.0899051 | 1263 | 3.1014033 | 1296 | 3.1126050 |
| 1231 | 3.0902580 | 1264 | 3.1017471 | 1297 | 3.1129400 |
| 1232 | 3.0906107 | 1265 | 3.1020905 | 1298 | 3.1132747 |
| 1233 | 3.0909631 | 1266 | 3.1024337 | 1299 | 3.1136091 |
| 1234 | 3.0913151 | 1267 | 3.1027766 | 1300 | 3.1139433 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1301 | 3.1142773 | 1334 | 3.1251558 | 1367 | 3.1357685 |
| 1302 | 3.1146110 | 1335 | 3.1254813 | 1368 | 3.1360861 |
| 1303 | 3.1149444 | 1336 | 3.1258064 | 1369 | 3.1364034 |
| 1304 | 3.1152776 | 1337 | 3.1261314 | 1370 | 3.1367206 |
| 1305 | 3.1156105 | 1338 | 3.1264561 | 1371 | 3.1370374 |
| 1306 | 3.1159432 | 1339 | 3.1267806 | 1372 | 3.1373541 |
| 1307 | 3.1162756 | 1340 | 3.1271048 | 1373 | 3.1376705 |
| 1308 | 3.1166077 | 1341 | 3.1274288 | 1374 | 3.1379867 |
| 1309 | 3.1169396 | 1342 | 3.1277525 | 1375 | 3.1383027 |
| 1310 | 3.1172713 | 1343 | 3.1280760 | 1376 | 3.1386184 |
| 1311 | 3.1176027 | 1344 | 3.1283993 | 1377 | 3.1389339 |
| 1312 | 3.1179338 | 1345 | 3.1287223 | 1378 | 3.1392492 |
| 1313 | 3.1182647 | 1346 | 3.1290450 | 1379 | 3.1395643 |
| 1314 | 3.1185954 | 1347 | 3.1293676 | 1380 | 3.1398791 |
| 1315 | 3.1189257 | 1348 | 3.1296899 | 1381 | 3.1401937 |
| 1316 | 3.1192559 | 1349 | 3.1300119 | 1382 | 3.1405080 |
| 1317 | 3.1195858 | 1350 | 3.1303338 | 1383 | 3.1408222 |
| 1318 | 3.1199154 | 1351 | 3.1306553 | 1384 | 3.1411361 |
| 1319 | 3.1202448 | 1352 | 3.1309767 | 1385 | 3.1414498 |
| 1320 | 3.1205739 | 1353 | 3.1312978 | 1386 | 3.1417632 |
| 1321 | 3.1209028 | 1354 | 3.1316187 | 1387 | 3.1420765 |
| 1322 | 3.1212314 | 1355 | 3.1319393 | 1388 | 3.1423895 |
| 1323 | 3.1215598 | 1356 | 3.1322597 | 1389 | 3.1427022 |
| 1324 | 3.1218880 | 1357 | 3.1325798 | 1390 | 3.1430148 |
| 1325 | 3.1222159 | 1358 | 3.1328998 | 1391 | 3.1433271 |
| 1326 | 3.1225435 | 1359 | 3.1332195 | 1392 | 3.1436392 |
| 1327 | 3.1228709 | 1360 | 3.1335389 | 1393 | 3.1439511 |
| 1328 | 3.1231981 | 1361 | 3.1338581 | 1394 | 3.1442628 |
| 1329 | 3.1235250 | 1362 | 3.1341771 | 1395 | 3.1445742 |
| 1330 | 3.1238516 | 1363 | 3.1344958 | 1396 | 3.1448854 |
| 1331 | 3.1241780 | 1364 | 3.1348144 | 1397 | 3.1451964 |
| 1332 | 3.1245042 | 1365 | 3.1351326 | 1398 | 3.1455072 |
| 1333 | 3.1248301 | 1366 | 3.1354507 | 1399 | 3.1458177 |
| 1334 | 3.1251558 | 1367 | 3.1357685 | 1400 | 3.1461280 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1401 | 3.1464381 | 1434 | 3.1565491 | 1467 | 3.1664301 |
| 1402 | 3.1467480 | 1435 | 3.1568519 | 1468 | 3.1667260 |
| 1403 | 3.1470577 | 1436 | 3.1571544 | 1469 | 3.1670218 |
| 1404 | 3.1473671 | 1437 | 3.1574568 | 1470 | 3.1673173 |
| 1405 | 3.1476763 | 1438 | 3.1577589 | 1471 | 3.1676127 |
| 1406 | 3.1479853 | 1439 | 3.1580608 | 1472 | 3.1679078 |
| 1407 | 3.1482941 | 1440 | 3.1583625 | 1473 | 3.1682027 |
| 1408 | 3.1486026 | 1441 | 3.1586640 | 1474 | 3.1684975 |
| 1409 | 2.1489110 | 1442 | 3.1589653 | 1475 | 3.1687920 |
| 1410 | 3.1492191 | 1443 | 3.1592663 | 1476 | 3.1690863 |
| 1411 | 3.1495270 | 1444 | 3.1595672 | 1477 | 3.1693805 |
| 1412 | 3.1498347 | 1445 | 3.1598678 | 1478 | 3.1696744 |
| 1413 | 3.1501422 | 1446 | 3.1601683 | 1479 | 3.1699682 |
| 1414 | 3.1504494 | 1447 | 3.1604685 | 1480 | 3.1702617 |
| 1415 | 3.1507564 | 1448 | 3.1607686 | 1481 | 3.1705550 |
| 1416 | 3.1510632 | 1449 | 3.1610684 | 1482 | 3.1708482 |
| 1417 | 3.1513698 | 1450 | 3.1613680 | 1483 | 3.1711411 |
| 1418 | 3.1516762 | 1451 | 3.1616674 | 1484 | 3.1714339 |
| 1419 | 3.1519824 | 1452 | 3.1619666 | 1485 | 3.1717264 |
| 1420 | 3.1522883 | 1453 | 3.1622656 | 1486 | 3.1720188 |
| 1421 | 3.1525941 | 1454 | 3.1625644 | 1487 | 3.1723110 |
| 1422 | 3.1528996 | 1455 | 3.1628630 | 1488 | 3.1726029 |
| 1423 | 3.1532049 | 1456 | 3.1631614 | 1489 | 3.1728947 |
| 1424 | 3.1535100 | 1457 | 3.1634595 | 1490 | 3.1731863 |
| 1425 | 3.1538149 | 1458 | 3.1637575 | 1491 | 3.1734776 |
| 1426 | 3.1541195 | 1459 | 3.1640553 | 1492 | 3.1737688 |
| 1427 | 3.1544240 | 1460 | 3.1643528 | 1493 | 3.1740598 |
| 1428 | 3.1547282 | 1461 | 3.1646502 | 1494 | 3.1743506 |
| 1429 | 3.1550322 | 1462 | 3.1649474 | 1495 | 3.1746412 |
| 1430 | 3.1553360 | 1463 | 3.1652443 | 1496 | 3.1749316 |
| 1431 | 3.1556396 | 1464 | 3.1655411 | 1497 | 3.1752218 |
| 1432 | 3.1559430 | 1465 | 3.1658376 | 1498 | 3.1755118 |
| 1433 | 3.1562462 | 1466 | 3.1661340 | 1499 | 3.1758016 |
| 1434 | 3.1565491 | 1467 | 3.1664301 | 1500 | 3.1760913 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1501 | 3.1763807 | 1534 | 3.1858253 | 1567 | 3.1950690 |
| 1502 | 3.1766699 | 1535 | 3.1861084 | 1568 | 3.1953460 |
| 1503 | 3.1769590 | 1536 | 3.1863912 | 1569 | 3.1956229 |
| 1504 | 3.1772478 | 1537 | 3.1866739 | 1570 | 3.1958996 |
| 1505 | 3.1775365 | 1538 | 3.1869563 | 1571 | 3.1961762 |
| 1506 | 3.1778250 | 1539 | 3.1872386 | 1572 | 3.1964525 |
| 1507 | 3.1781132 | 1540 | 3.1875207 | 1573 | 3.1967287 |
| 1508 | 3.1784013 | 1541 | 3.1878026 | 1574 | 3.1970047 |
| 1509 | 3.1786892 | 1542 | 3.1880844 | 1575 | 3.1972806 |
| 1510 | 3.1789769 | 1543 | 3.1883659 | 1576 | 3.1975562 |
| 1511 | 3.1792645 | 1544 | 3.1886473 | 1577 | 3.1978317 |
| 1512 | 3.1795518 | 1545 | 3.1889285 | 1578 | 3.1981070 |
| 1513 | 3.1798389 | 1546 | 3.1892095 | 1579 | 3.1983821 |
| 1514 | 3.1801259 | 1547 | 3.1894903 | 1580 | 3.1986571 |
| 1515 | 3.1804126 | 1548 | 3.1897709 | 1581 | 3.1989319 |
| 1516 | 3.1806992 | 1549 | 3.1900514 | 1582 | 3.1992065 |
| 1517 | 3.1809856 | 1550 | 3.1903317 | 1583 | 3.1994809 |
| 1518 | 3.1812718 | 1551 | 3.1906118 | 1584 | 3.1997552 |
| 1519 | 3.1815578 | 1552 | 3.1908917 | 1585 | 3.2000293 |
| 1520 | 3.1818436 | 1553 | 3.1911714 | 1586 | 3.2003032 |
| 1521 | 3.1821292 | 1554 | 3.1914510 | 1587 | 3.2005769 |
| 1522 | 3.1824146 | 1555 | 3.1917304 | 1588 | 3.2008505 |
| 1523 | 3.1826999 | 1556 | 3.1920096 | 1589 | 3.2011239 |
| 1524 | 3.1829850 | 1557 | 3.1922886 | 1590 | 3.2013971 |
| 1525 | 3.1832698 | 1558 | 3.1925674 | 1591 | 3.2016702 |
| 1526 | 3.1835545 | 1559 | 3.1928461 | 1592 | 3.2019431 |
| 1527 | 3.1838390 | 1560 | 3.1931246 | 1593 | 3.2022158 |
| 1528 | 3.1841233 | 1561 | 3.1934029 | 1594 | 3.2024883 |
| 1529 | 3.1844075 | 1562 | 3.1936810 | 1595 | 3.2027607 |
| 1530 | 3.1846914 | 1563 | 3.1939590 | 1596 | 3.2030329 |
| 1531 | 3.1849752 | 1564 | 3.1942367 | 1597 | 3.2033049 |
| 1532 | 3.1852588 | 1565 | 3.1945143 | 1598 | 3.2035768 |
| 1533 | 3.1855421 | 1566 | 3.1947917 | 1599 | 3.2038485 |
| 1534 | 3.1858253 | 1567 | 3.1950690 | 1600 | 3.2041200 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1601 | 3.2043913 | 1634 | 3.2132521 | 1667 | 3.2219356 |
| 1602 | 3.2046625 | 1635 | 3.2135178 | 1668 | 3.2221960 |
| 1603 | 3.2049335 | 1636 | 3.2137833 | 1669 | 3.2224563 |
| 1604 | 3.2052044 | 1637 | 3.2140487 | 1670 | 3.2227165 |
| 1605 | 3.2054750 | 1638 | 3.2143139 | 1671 | 3.2229764 |
| 1606 | 3.2057455 | 1639 | 3.2145789 | 1672 | 3.2232363 |
| 1607 | 3.2060159 | 1640 | 3.2148438 | 1673 | 3.2234959 |
| 1608 | 3.2062860 | 1641 | 3.2151086 | 1674 | 3.2237555 |
| 1609 | 3.2065560 | 1642 | 3.2153732 | 1675 | 3.2240148 |
| 1610 | 3.2068259 | 1643 | 3.2156376 | 1676 | 3.2242740 |
| 1611 | 3.2070955 | 1644 | 3.2159018 | 1677 | 3.2245331 |
| 1612 | 3.2073650 | 1645 | 3.2161659 | 1678 | 3.2247920 |
| 1613 | 3.2076344 | 1646 | 3.2164298 | 1679 | 3.2250507 |
| 1614 | 3.2079035 | 1647 | 3.2166936 | 1680 | 3.2253093 |
| 1615 | 3.2081725 | 1648 | 3.2169572 | 1681 | 3.2255677 |
| 1616 | 3.2084414 | 1649 | 3.2172206 | 1682 | 3.2258260 |
| 1617 | 3.2087100 | 1650 | 3.2174839 | 1683 | 3.2260841 |
| 1618 | 3.2089785 | 1651 | 3.2177471 | 1684 | 3.2263421 |
| 1619 | 3.2092468 | 1652 | 3.2180100 | 1685 | 3.2265999 |
| 1620 | 3.2095150 | 1653 | 3.2182728 | 1686 | 3.2268576 |
| 1621 | 3.2097830 | 1654 | 3.2185355 | 1687 | 3.2271151 |
| 1622 | 3.2100508 | 1655 | 3.2187980 | 1688 | 3.2273724 |
| 1623 | 3.2103185 | 1656 | 3.2190603 | 1689 | 3.2276296 |
| 1624 | 3.2105860 | 1657 | 3.2193225 | 1690 | 3.2278867 |
| 1625 | 3.2108534 | 1658 | 3.2195845 | 1691 | 3.2281436 |
| 1626 | 3.2111205 | 1659 | 3.2198464 | 1692 | 3.2284004 |
| 1627 | 3.2113876 | 1660 | 3.2201081 | 1693 | 3.2286570 |
| 1628 | 3.2116544 | 1661 | 3.2203696 | 1694 | 3.2289134 |
| 1629 | 3.2119211 | 1662 | 3.2206310 | 1695 | 3.2291697 |
| 1630 | 3.2121876 | 1663 | 3.2208922 | 1696 | 3.2294258 |
| 1631 | 3.2124540 | 1664 | 3.2211533 | 1697 | 3.2296818 |
| 1632 | 3.2127201 | 1665 | 3.2214142 | 1698 | 3.2299377 |
| 1633 | 3.2129862 | 1666 | 3.2216750 | 1699 | 3.2301934 |
| 1634 | 3.2132521 | 1667 | 3.2219356 | 1700 | 3.2304489 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1701 | 3.2307043 | 1734 | 3.2390491 | 1767 | 3.2472365 |
| 1702 | 3.2309596 | 1735 | 3.2392995 | 1768 | 3.2474823 |
| 1703 | 3.2312146 | 1736 | 3.2395497 | 1769 | 3.2477278 |
| 1704 | 3.2314696 | 1737 | 3.2397998 | 1770 | 3.2479733 |
| 1705 | 3.2317244 | 1738 | 3.2400498 | 1771 | 3.2482186 |
| 1706 | 3.2319790 | 1739 | 3.2402996 | 1772 | 3.2484637 |
| 1707 | 3.2322335 | 1740 | 3.2405492 | 1773 | 3.2487087 |
| 1708 | 3.2324879 | 1741 | 3.2407988 | 1774 | 3.2489536 |
| 1709 | 3.2327421 | 1742 | 3.2410481 | 1775 | 3.2491984 |
| 1710 | 3.2329961 | 1743 | 3.2412974 | 1776 | 3.2494430 |
| 1711 | 3.2332500 | 1744 | 3.2415465 | 1777 | 3.2496874 |
| 1712 | 3.2335038 | 1745 | 3.2417954 | 1778 | 3.2499318 |
| 1713 | 3.2337574 | 1746 | 3.2420442 | 1779 | 3.2501759 |
| 1714 | 3.2340108 | 1747 | 3.2422929 | 1780 | 3.2504200 |
| 1715 | 3.2342641 | 1748 | 3,2425414 | 1781 | 3.2506639 |
| 1716 | 3.2345173 | 1749 | 3.2427898 | 1782 | 3.2509077 |
| 1717 | 3.2347703 | 1750 | 3.2430380 | 1783 | 3.2511513 |
| 1718 | 3.2350232 | 1751 | 3.2432861 | 1784 | 3.2513948 |
| 1719 | 3.2352759 | 1752 | 3.2435341 | 1785 | 3.2516382 |
| 1720 | 3.2355284 | 1753 | 3.2437819 | 1786 | 3.2518815 |
| 1721 | 3.2357809 | 1754 | 3.2440296 | 1787 | 3.2521246 |
| 1722 | 3.2360331 | 1755 | 3.2442771 | 1788 | 3.2523675 |
| 1723 | 3.2362853 | 1756 | 3.2445245 | 1789 | 3.2526103 |
| 1724 | 3.2365373 | 1757 | 3.2447718 | 1790 | 3.2528530 |
| 1725 | 3.2367891 | 1758 | 3.2450189 | 1791 | 3.2530956 |
| 1726 | 3.2370408 | 1759 | 3.2452658 | 1792 | 3.2533380 |
| 1727 | 3.2372923 | 1760 | 3.2455127 | 1793 | 3.2535803 |
| 1728 | 3.2375437 | 1761 | 3.2457594 | 1794 | 3.2538224 |
| 1729 | 3.2377950 | 1762 | 3.2460059 | 1795 | 3.2540645 |
| 1730 | 3.2380461 | 1763 | 3.2462523 | 1796 | 3.2543063 |
| 1731 | 3.2382971 | 1764 | 3.2464986 | 1797 | 3.2545481 |
| 1732 | 3.2385479 | 1765 | 3.2467447 | 1798 | 3.2547897 |
| 1733 | 3.2387986 | 1766 | 3.2469907 | 1799 | 3.2550312 |
| 1734 | 3.2390491 | 1767 | 3.2472365 | 1800 | 3.2552725 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 1801 | 3.2555137 | 1834 | 3.2633993 | 1867 | 3.2711443 |
| 1802 | 3.2557548 | 1835 | 3.2636361 | 1868 | 3.2713769 |
| 1803 | 3.2559957 | 1836 | 3.2638727 | 1869 | 3.2716093 |
| 1804 | 3.2562365 | 1837 | 3.2641092 | 1870 | 3.2718416 |
| 1805 | 3.2564772 | 1838 | 3.2643455 | 1871 | 3.2720738 |
| 1806 | 3.2567177 | 1839 | 3.2645817 | 1872 | 3.2723058 |
| 1807 | 3.2569582 | 1840 | 3.2648178 | 1873 | 3.2725378 |
| 1808 | 3.2571984 | 1841 | 3.2650538 | 1874 | 3.2727696 |
| 1809 | 3.2574386 | 1842 | 3.2652896 | 1875 | 3.2730013 |
| 1810 | 3.2576786 | 1843 | 3.2655253 | 1876 | 3.2732328 |
| 1811 | 3.2579184 | 1844 | 3.2657609 | 1877 | 3.2734643 |
| 1812 | 3.2581582 | 1845 | 3.2659964 | 1878 | 3.2736956 |
| 1813 | 3.2583978 | 1846 | 3.2662317 | 1879 | 3.2739268 |
| 1814 | 3.2586373 | 1847 | 3.2664669 | 1880 | 3.2741578 |
| 1815 | 3.2588766 | 1848 | 3.2667020 | 1881 | 3.2743888 |
| 1816 | 3.2591158 | 1849 | 3.2669369 | 1882 | 3.2746196 |
| 1817 | 3.2593549 | 1850 | 3.2671717 | 1883 | 3.2748503 |
| 1818 | 3.2595939 | 1851 | 3.2674064 | 1884 | 3.2750809 |
| 1819 | 3.2598327 | 1852 | 3.2676410 | 1885 | 3.2753113 |
| 1820 | 3.2600714 | 1853 | 3.2678754 | 1886 | 3.2755417 |
| 1821 | 3.2603099 | 1854 | 3.2681097 | 1887 | 3.2757719 |
| 1822 | 3.2605484 | 1855 | 3.2683439 | 1888 | 3.2760020 |
| 1823 | 3.2607867 | 1856 | 3.2685780 | 1889 | 3.2762320 |
| 1824 | 3.2610248 | 1857 | 3.2688119 | 1890 | 3.2764618 |
| 1825 | 3.2612629 | 1858 | 3.2690457 | 1891 | 3.2766915 |
| 1826 | 3.2615008 | 1859 | 3.2692794 | 1892 | 3.2769211 |
| 1827 | 3.2617385 | 1860 | 3.2695129 | 1893 | 3.2771506 |
| 1828 | 3.2619762 | 1861 | 3.2697464 | 1894 | 3.2773800 |
| 1829 | 3.2622137 | 1862 | 3.2699797 | 1895 | 3.2776092 |
| 1830 | 3.2624511 | 1863 | 3.2702128 | 1895 | 3.2778383 |
| 1831 | 3.2626883 | 1864 | 3.2704459 | 1897 | 3.2780673 |
| 1832 | 3.2629255 | 1865 | 3.2706788 | 1898 | 3.2782962 |
| 1833 | 3.2631625 | 1866 | 3.2709116 | 1899 | 3.2785250 |
| 1834 | 3.2633993 | 1867 | 3.2711443 | 1900 | 3.2787536 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 1901 | 3.2789821 | 1934 | 3.2864565 | 1967 | 3.2938044 |
| 1902 | 3.2792105 | 1935 | 3.2866810 | 1968 | 3.2940251 |
| 1903 | 3.2794388 | 1936 | 3.2869054 | 1969 | 3.2942457 |
| 1904 | 3.2796669 | 1937 | 3.2871296 | 1970 | 3.2944662 |
| 1905 | 3.2798950 | 1938 | 3.2873538 | 1971 | 3.2946866 |
| 1906 | 3.2801229 | 1939 | 3.2875778 | 1972 | 3.2949069 |
| 1907 | 3.2803507 | 1940 | 3.2878017 | 1973 | 3.2951271 |
| 1908 | 3.2805784 | 1941 | 3.2880255 | 1974 | 3.2953471 |
| 1909 | 3.2808059 | 1942 | 3.2882492 | 1975 | 3.2955671 |
| 1910 | 3.2810334 | 1943 | 3.2884728 | 1976 | 3.2957869 |
| 1911 | 3.2812607 | 1944 | 3.2886963 | 1977 | 3.2960067 |
| 1912 | 3.2814879 | 1945 | 3.2889196 | 1978 | 3.2962263 |
| 1913 | 3.2817150 | 1946 | 3.2891428 | 1979 | 3.2964458 |
| 1914 | 3.2819419 | 1947 | 3.2893659 | 1980 | 3.2966652 |
| 1915 | 3.2821688 | 1948 | 3.2895889 | 1981 | 3.2968845 |
| 1916 | 3.2823955 | 1949 | 3.2898118 | 1982 | 3.2971036 |
| 1917 | 3.2826221 | 1950 | 3.2900346 | 1983 | 3.2973227 |
| 1918 | 3.2828486 | 1951 | 3.2902573 | 1984 | 3.2975417 |
| 1919 | 3.2830750 | 1952 | 3.2904798 | 1985 | 3.2977605 |
| 1920 | 3.2833012 | 1953 | 3.2907022 | 1986 | 3.2979792 |
| 1921 | 3.2835274 | 1954 | 3.2909246 | 1987 | 3.2981979 |
| 1922 | 3.2837534 | 1955 | 3.2911468 | 1988 | 3.2984164 |
| 1923 | 3.2839793 | 1956 | 3.2913688 | 1989 | 3.2986348 |
| 1924 | 3.2842051 | 1957 | 3.2915908 | 1990 | 3.2988531 |
| 1925 | 3.2844307 | 1958 | 3.2918127 | 1991 | 3.2990713 |
| 1926 | 3.2846563 | 1959 | 3.2920344 | 1992 | 3.2992893 |
| 1927 | 3.2848817 | 1960 | 3.2922561 | 1993 | 3.2995073 |
| 1928 | 3.2851070 | 1961 | 3.2924776 | 1994 | 3.2997251 |
| 1929 | 3.2853322 | 1962 | 3.2926990 | 1995 | 3.2999429 |
| 1930 | 3.2855573 | 1963 | 3.2929203 | 1996 | 3.3001605 |
| 1931 | 3.2857823 | 1964 | 3.2931415 | 1997 | 3.3003781 |
| 1932 | 3.2860071 | 1965 | 3.2933626 | 1998 | 3.3005955 |
| 1933 | 3.2862318 | 1966 | 3.2935835 | 1999 | 3.3008128 |
| 1934 | 3.2864565 | 1967 | 3.2938044 | 2000 | 3.3010300 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 2001 | 3.3012471 | 2034 | 3.3083509 | 2067 | 3.3153405 |
| 2002 | 3.3014641 | 2035 | 3.3085644 | 2068 | 3.3155505 |
| 2003 | 3.3016809 | 2036 | 3.3087778 | 2069 | 3.3157605 |
| 2004 | 3.3018977 | 2037 | 3.3089910 | 2070 | 3.3159703 |
| 2005 | 3.3021144 | 2038 | 3.3092042 | 2071 | 3.3161801 |
| 2006 | 3.3023309 | 2039 | 3.3094172 | 2072 | 3.3163897 |
| 2007 | 3.3025474 | 2040 | 3.3096302 | 2073 | 3.3165993 |
| 2008 | 3.3027637 | 2041 | 3.3098430 | 2074 | 3.3168087 |
| 2009 | 3.3029799 | 2042 | 3.3100557 | 2075 | 3.3170181 |
| 2010 | 3.3031961 | 2043 | 3.3102684 | 2076 | 3.3172273 |
| 2011 | 3.3034121 | 2044 | 3.3104809 | 2077 | 3.3174365 |
| 2012 | 3.3036280 | 2045 | 3.3106933 | 2078 | 3.3176455 |
| 2013 | 3.3038438 | 2046 | 3.3109056 | 2079 | 3.3178545 |
| 2014 | 3.3040595 | 2047 | 3.3111178 | 2080 | 3.3180633 |
| 2015 | 3.3042751 | 2048 | 3.3113299 | 2081 | 3.3182721 |
| 2016 | 3.3044905 | 2049 | 3.3115420 | 2082 | 3.3184807 |
| 2017 | 3.3047059 | 2050 | 3.3117539 | 2083 | 3.3186893 |
| 2018 | 3.3049212 | 2051 | 3.3119657 | 2084 | 3.3188977 |
| 2019 | 3.3051363 | 2052 | 3.3121774 | 2085 | 3.3191061 |
| 2020 | 3.3053514 | 2053 | 3.3123889 | 2086 | 3.3193143 |
| 2021 | 3.3055663 | 2054 | 3.3126004 | 2087 | 3.3195224 |
| 2022 | 3.3057812 | 2055 | 3.3128118 | 2088 | 3.3197305 |
| 2023 | 3.3059959 | 2056 | 3.3130231 | 2089 | 3.3199384 |
| 2024 | 3.3062105 | 2057 | 3.3132343 | 2090 | 3.3201463 |
| 2025 | 3.3064250 | 2058 | 3.3134454 | 2091 | 3.3203540 |
| 2026 | 3.3066394 | 2059 | 3.3136563 | 2092 | 3.3205617 |
| 2027 | 3.3068537 | 2060 | 3.3138672 | 2093 | 3.3207692 |
| 2028 | 3.3070679 | 2061 | 3.3140780 | 2094 | 3.3209767 |
| 2029 | 3.3072820 | 2062 | 3.3142887 | 2095 | 3.3211840 |
| 2030 | 3.3074960 | 2063 | 3.3144992 | 2096 | 3.3213913 |
| 2031 | 3.3077099 | 2064 | 3.3147097 | 2097 | 3.3215984 |
| 2032 | 3.3079237 | 2065 | 3.3149200 | 2098 | 3.3218055 |
| 2033 | 3.3081374 | 2066 | 3.3151303 | 2099 | 3.3220124 |
| 2034 | 3.3083509 | 2067 | 3.3153405 | 2100 | 3.3222193 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 2101 | 3.3224260 | 2134 | 3.3291944 | 2167 | 3.3358589 |
| 2102 | 3.3226327 | 2135 | 3.3293979 | 2168 | 3.3360593 |
| 2103 | 3.3228393 | 2136 | 3.3296012 | 2169 | 3.3362596 |
| 2104 | 3.3230457 | 2137 | 3.3298045 | 2170 | 3.3364597 |
| 2105 | 3.3232521 | 2138 | 3.3300077 | 2171 | 3.3366598 |
| 2106 | 3.3234584 | 2139 | 3.3302108 | 2172 | 3.3368598 |
| 2107 | 3.3236645 | 2140 | 3.3304138 | 2173 | 3.3370597 |
| 2108 | 3.3238706 | 2141 | 3.3306167 | 2174 | 3.3372595 |
| 2109 | 3.3240766 | 2142 | 3.3308195 | 2175 | 3.3374593 |
| 2110 | 3.3242825 | 2143 | 3.3310222 | 2176 | 3.3376589 |
| 2111 | 3.3244882 | 2144 | 3.3312248 | 2177 | 3.3378584 |
| 2112 | 3.3246939 | 2145 | 3.3314273 | 2178 | 3.3380579 |
| 2113 | 3.3248995 | 2146 | 3.3316297 | 2179 | 3.3382572 |
| 2114 | 3.3251050 | 2147 | 3.3318320 | 2180 | 3.3384565 |
| 2115 | 3.3253104 | 2148 | 3.3320343 | 2181 | 3.3386557 |
| 2116 | 3.3255157 | 2149 | 3.3322364 | 2182 | 3.3388547 |
| 2117 | 3.3257209 | 2150 | 3.3324385 | 2183 | 3.3390537 |
| 2118 | 3.3259260 | 2151 | 3.3326404 | 2184 | 3.3392526 |
| 2119 | 3.3261310 | 2152 | 3.3328423 | 2185 | 3.3394514 |
| 2120 | 3.3263359 | 2153 | 3.3330440 | 2186 | 3.3396501 |
| 2121 | 3.3265407 | 2154 | 3.3332457 | 2187 | 3.3398488 |
| 2122 | 3.3267454 | 2155 | 3.3334473 | 2188 | 3.3400473 |
| 2123 | 3.3269500 | 2156 | 3.3336488 | 2189 | 3.3402458 |
| 2124 | 3.3271545 | 2157 | 3.3338501 | 2190 | 3.3404441 |
| 2125 | 3.3273589 | 2158 | 3.3340514 | 2191 | 3.3406424 |
| 2126 | 3.3275633 | 2159 | 3.3342526 | 2192 | 3.3408405 |
| 2127 | 3.3277675 | 2160 | 3.3344537 | 2193 | 3.3410386 |
| 2128 | 3.3279716 | 2161 | 3.3346548 | 2194 | 3.3412366 |
| 2129 | 3.3281757 | 2162 | 3.3348557 | 2195 | 3.3414345 |
| 2130 | 3.3283796 | 2163 | 3.3350565 | 2196 | 3.3416323 |
| 2131 | 3.3285834 | 2164 | 3.3352572 | 2197 | 3.3418301 |
| 2132 | 3.3287872 | 2165 | 3.3354579 | 2198 | 3.3420277 |
| 2133 | 3.3289909 | 2166 | 3.3356585 | 2199 | 3.3422252 |
| 2134 | 3.3291944 | 2167 | 3.3358589 | 2200 | 3.3424227 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 2201 | 3.3426200 | 2234 | 3.3490832 | 2267 | 3.3554515 |
| 2202 | 3.3428173 | 2235 | 3.3492775 | 2268 | 3.3556430 |
| 2203 | 3.3430145 | 2236 | 3.3494718 | 2269 | 3.2558345 |
| 2204 | 3.3432116 | 2237 | 3.3496660 | 2270 | 3.3560259 |
| 2205 | 3.3434086 | 2238 | 3.3498601 | 2271 | 3.3562171 |
| 2206 | 3.3436055 | 2239 | 3.3500541 | 2272 | 3.3564083 |
| 2207 | 3.3438023 | 2240 | 3.3502480 | 2273 | 3.3565994 |
| 2208 | 3.3439991 | 2241 | 3.3504419 | 2274 | 3.3567905 |
| 2209 | 3.3441957 | 2242 | 3.3506356 | 2275 | 3.3569814 |
| 2210 | 3.3443923 | 2243 | 3.3508293 | 2276 | 3.3571723 |
| 2211 | 3.3445887 | 2244 | 3.3510228 | 2277 | 3.3573630 |
| 2212 | 3.3447851 | 2245 | 3.3512163 | 2278 | 3.3575537 |
| 2213 | 3.3449814 | 2246 | 3.3514098 | 2279 | 3.3577443 |
| 2214 | 3.3451776 | 2247 | 3.3516031 | 2280 | 3.3579348 |
| 2215 | 3.3453737 | 2248 | 3.3517963 | 2281 | 3.3581253 |
| 2216 | 3.3455698 | 2249 | 3.3519895 | 2282 | 3.3583156 |
| 2217 | 3.3457657 | 2250 | 3.3521825 | 2283 | 3.3585059 |
| 2218 | 3.3459615 | 2251 | 3.3523755 | 2284 | 3.3586961 |
| 2219 | 3.3461573 | 2252 | 3.3525684 | 2285 | 3.3588862 |
| 2220 | 3.3463530 | 2253 | 3.3527612 | 2286 | 3.3590762 |
| 2221 | 3.3465486 | 2254 | 3.3529539 | 2287 | 3.3592662 |
| 2222 | 3.3467441 | 2255 | 3.3531465 | 2288 | 3.3594560 |
| 2223 | 3.3469395 | 2256 | 3.3533391 | 2289 | 3.3596458 |
| 2224 | 3.3471348 | 2257 | 3.3535316 | 2290 | 3.3598357 |
| 2225 | 3.3473300 | 2258 | 3.3537239 | 2291 | 3.3600251 |
| 2226 | 3.3475252 | 2259 | 3.3539162 | 2292 | 3.3602146 |
| 2227 | 3.3477202 | 2260 | 3.3541084 | 2293 | 3.3604041 |
| 2228 | 3.3479152 | 2261 | 3.3543006 | 2294 | 3.3605934 |
| 2229 | 3.3481101 | 2262 | 3.3544926 | 2295 | 3.3607827 |
| 2230 | 3.3483049 | 2263 | 3.3546846 | 2296 | 3.3609719 |
| 2231 | 3.3484996 | 2264 | 3.3548764 | 2297 | 3.3611610 |
| 2232 | 3.3486942 | 2265 | 3.3550682 | 2298 | 3.3613500 |
| 2233 | 3.3488887 | 2266 | 3.3552599 | 2299 | 3.3615390 |
| 2234 | 3.3490832 | 2267 | 3.3554515 | 2300 | 3.3617278 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 2301 | 3.3619166 | 2334 | 3.3681008 | 2367 | 3.3741983 |
| 2302 | 3.3621053 | 2335 | 3.3682869 | 2368 | 3.3743817 |
| 2303 | 3.3622939 | 2336 | 3.3684728 | 2369 | 3.3745651 |
| 2304 | 3.3624825 | 2337 | 3.3686587 | 2370 | 3.3747483 |
| 2305 | 3.3626709 | 2338 | 3.3688445 | 2371 | 3.3749316 |
| 2306 | 3.3628593 | 2339 | 3.3690302 | 2372 | 3.3751147 |
| 2307 | 3.3630476 | 2340 | 3.3692159 | 2373 | 3.3752977 |
| 2308 | 3.3632358 | 2341 | 3.3694014 | 2374 | 3.3754807 |
| 2309 | 3.3634239 | 2342 | 3.3695869 | 2375 | 3.3756636 |
| 2310 | 3.3636120 | 2343 | 3.3697723 | 2376 | 3.3758464 |
| 2311 | 3.3637999 | 2344 | 3.3699576 | 2377 | 3.3760292 |
| 2312 | 3.3639878 | 2345 | 3.3701428 | 2378 | 3.3762118 |
| 2313 | 3.3641756 | 2346 | 3.3703280 | 2379 | 3.3763944 |
| 2314 | 3.3643633 | 2347 | 3.3705131 | 2380 | 3.3765769 |
| 2315 | 3.3645510 | 2348 | 3.3706981 | 2381 | 3.3767594 |
| 2316 | 3.3647386 | 2349 | 3.3708830 | 2382 | 3.3769418 |
| 2317 | 3.3649260 | 2350 | 3.3710679 | 2383 | 3.3771240 |
| 2318 | 3.3651134 | 2351 | 3.3712526 | 2384 | 3.3773062 |
| 2319 | 3.3653007 | 2352 | 3.3714373 | 2385 | 3.3774884 |
| 2320 | 3.3654880 | 2353 | 3.3716219 | 2386 | 3.3776704 |
| 2321 | 3.3656751 | 2354 | 3.3718065 | 2387 | 3.3778524 |
| 2322 | 3.3658622 | 2355 | 3.3719909 | 2388 | 3.3780343 |
| 2323 | 3.3660492 | 2356 | 3.3721753 | 2389 | 3.3782161 |
| 2324 | 3.3662361 | 2357 | 3.3723596 | 2390 | 3.3783979 |
| 2325 | 3.3664230 | 2358 | 3.3725438 | 2391 | 3.3785796 |
| 2326 | 3.3666097 | 2359 | 3.3727279 | 2392 | 3.3787612 |
| 2327 | 3.3667964 | 2360 | 3.3729120 | 2393 | 3.3789427 |
| 2328 | 3.3669830 | 2361 | 3.3730960 | 2394 | 3.3791241 |
| 2329 | 3.3671695 | 2362 | 3.3732799 | 2395 | 3.3793055 |
| 2330 | 3.3673559 | 2363 | 3.3734637 | 2396 | 3.3794868 |
| 2331 | 3.3675423 | 2364 | 3.3736475 | 2397 | 3.3796680 |
| 2332 | 3.3677285 | 2365 | 3.3738311 | 2398 | 3.3798492 |
| 2333 | 3.3679147 | 2366 | 3.3740147 | 2399 | 3.3800302 |
| 2334 | 3.3681008 | 2367 | 3.3741983 | 2400 | 3.3802112 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 2401 | 3.3803922 | 2434 | 3.3863206 | 2467 | 3.3921691 |
| 2402 | 3.3805730 | 2435 | 3.3864990 | 2468 | 3.3923452 |
| 2403 | 3.3807538 | 2436 | 3.3866773 | 2469 | 3.3925211 |
| 2404 | 3.3809345 | 2437 | 3.3868555 | 2470 | 3.3926969 |
| 2405 | 3.3811151 | 2438 | 3.3870337 | 2471 | 3.3928727 |
| 2406 | 3.3812956 | 2439 | 3.3872118 | 2472 | 3.3930485 |
| 2407 | 3.3814761 | 2440 | 3.3873898 | 2473 | 3.3932241 |
| 2408 | 3.3816565 | 2441 | 3.3875678 | 2474 | 3.3933997 |
| 2409 | 3.3818368 | 2442 | 3.3877457 | 2475 | 3.3935752 |
| 2410 | 3.3820170 | 2443 | 3.3879235 | 2476 | 3.3937506 |
| 2411 | 3.3821972 | 2444 | 3.3881012 | 2477 | 3.3939260 |
| 2412 | 3.3823773 | 2445 | 3.3882789 | 2478 | 3.3941013 |
| 2413 | 3.3825573 | 2446 | 3.3884565 | 2479 | 3.3942765 |
| 2414 | 3.3827373 | 2447 | 3.3886340 | 2480 | 3.3944517 |
| 2415 | 3.3829171 | 2448 | 3.3888114 | 2481 | 3.3946268 |
| 2416 | 3.3830969 | 2449 | 3.3889888 | 2482 | 3.3948018 |
| 2417 | 3.3832766 | 2450 | 3.3891661 | 2483 | 3.3949767 |
| 2418 | 3.3834563 | 2451 | 3.3893433 | 2484 | 3.3951516 |
| 2419 | 3.3836359 | 2452 | 3.3895205 | 2485 | 3.3953264 |
| 2420 | 3.3838154 | 2453 | 3.3896975 | 2486 | 3.3955011 |
| 2421 | 3.3839948 | 2454 | 3.3898746 | 2487 | 3.3956758 |
| 2422 | 3.3841741 | 2455 | 3.3900515 | 2488 | 3.3958504 |
| 2423 | 3.3843534 | 2456 | 3.3902284 | 2489 | 3.3960249 |
| 2424 | 3.3845326 | 2457 | 3.3904052 | 2490 | 3.3961993 |
| 2425 | 3.3847117 | 2458 | 3.3905819 | 2491 | 3.3963737 |
| 2426 | 3.3848908 | 2459 | 3.3907585 | 2492 | 3.3965480 |
| 2427 | 3.3850698 | 2460 | 3.3909351 | 2493 | 3.3967223 |
| 2428 | 3.3852487 | 2461 | 3.3911116 | 2494 | 3.3968964 |
| 2429 | 3.3854275 | 2462 | 3.3912880 | 2495 | 3.3970705 |
| 2430 | 3.3856063 | 2463 | 3.3914644 | 2496 | 3.3972446 |
| 2431 | 3.3857850 | 2464 | 3.3916407 | 2497 | 3.3974185 |
| 2432 | 3.3859636 | 2465 | 3.3918169 | 2498 | 3.3975924 |
| 2433 | 3.3861421 | 2466 | 3.3919931 | 2499 | 3.3977662 |
| 2434 | 3.3863206 | 2467 | 3.3921691 | 2500 | 3.3979400 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 2501 | 3.3981137 | 2534 | 3.4038066 | 2567 | 3.4094259 |
| 2502 | 3.3982873 | 2535 | 3.4039780 | 2568 | 3.4095950 |
| 2503 | 3.3984608 | 2536 | 3.4041492 | 2569 | 3.4097641 |
| 2504 | 3.3986343 | 2537 | 2.4043205 | 2570 | 3.4099331 |
| 2505 | 3.3988077 | 2538 | 3.4044916 | 2571 | 3.4101021 |
| 2506 | 3.3989811 | 2539 | 3.4046627 | 2572 | 3.4102710 |
| 2507 | 3.3991543 | 2540 | 3.4048337 | 2573 | 3.4104398 |
| 2508 | 3.3993275 | 2541 | 3.4050047 | 2574 | 3.4106085 |
| 2509 | 3.3995007 | 2542 | 3.4051755 | 2575 | 3.4107772 |
| 2510 | 3.3996737 | 2543 | 3.4053464 | 2576 | 3.4109459 |
| 2511 | 3.3998467 | 2544 | 3.4055171 | 2577 | 3.4111144 |
| 2512 | 3.4000196 | 2545 | 3.4056878 | 2578 | 3.4112829 |
| 2513 | 3.4001925 | 2546 | 3.4058584 | 2579 | 3.4114513 |
| 2514 | 3.4003653 | 2547 | 3.4060289 | 2580 | 3.4116197 |
| 2515 | 3.4005380 | 2548 | 3.4061994 | 2581 | 3.4117880 |
| 2516 | 3.4007106 | 2549 | 3.4063698 | 2582 | 3.4119562 |
| 2517 | 3.4008832 | 2550 | 3.4065402 | 2583 | 3.4121244 |
| 2518 | 3.4010557 | 2551 | 3.4067105 | 2584 | 3.4122925 |
| 2519 | 3.4012282 | 2552 | 3.4068807 | 2585 | 3.4124605 |
| 2520 | 3.4014005 | 2553 | 3.4070508 | 2586 | 3.4126285 |
| 2521 | 3.4015728 | 2554 | 3.4072209 | 2587 | 3.4127964 |
| 2522 | 3.4017451 | 2555 | 3.4073909 | 2588 | 3.4129643 |
| 2523 | 3.4019173 | 2556 | 3.4075608 | 2589 | 3.4131320 |
| 2524 | 3.4020893 | 2557 | 3.4077307 | 2590 | 3.4132998 |
| 2525 | 3.4022614 | 2558 | 3.4079005 | 2591 | 3.4134674 |
| 2526 | 3.4024333 | 2559 | 3.4080703 | 2592 | 3.4136350 |
| 2527 | 3.4026052 | 2560 | 3.4082400 | 2593 | 3.4138025 |
| 2528 | 3.4027771 | 2561 | 3.4084096 | 2594 | 3.4139700 |
| 2529 | 3.4029488 | 2562 | 3.4085791 | 2595 | 3.4141374 |
| 2530 | 3.4031205 | 2563 | 3.4087486 | 2596 | 3.4143047 |
| 2531 | 3.4032921 | 2564 | 3.4089180 | 2597 | 3.4144719 |
| 2532 | 3.4034637 | 2565 | 3.4090874 | 2598 | 3.4146391 |
| 2533 | 3.4036352 | 2566 | 3.4092567 | 2599 | 3.4148063 |
| 2534 | 3.4038066 | 2567 | 3.4094259 | 2600 | 3.4149733 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 2601 | 3.4151404 | 2634 | 3.4206158 | 2667 | 3.4260230 |
| 2602 | 3.4153073 | 2635 | 3.4207806 | 2668 | 3.4261858 |
| 2603 | 3.4154742 | 2636 | 3.4209454 | 2669 | 3.4263486 |
| 2604 | 3.4156410 | 2637 | 3.4211101 | 2670 | 3.4265113 |
| 2605 | 3.4158077 | 2638 | 3.4212748 | 2671 | 3.4266739 |
| 2606 | 3.4159744 | 2639 | 3.4214394 | 2672 | 3.4268365 |
| 2607 | 3.4161410 | 2640 | 3.4216039 | 2673 | 3.4269990 |
| 2608 | 3.4163076 | 2641 | 3.4217684 | 2674 | 3.4271614 |
| 2609 | 3.4164741 | 2642 | 3.4219328 | 2675 | 3.4273238 |
| 2610 | 3.4166405 | 2643 | 3.4220972 | 2676 | 3.4274861 |
| 2611 | 3.4168069 | 2644 | 3.4222614 | 2677 | 3.4276484 |
| 2612 | 3.4169732 | 2645 | 3.4224257 | 2678 | 3.4278106 |
| 2613 | 3.4171394 | 2646 | 3.4225898 | 2679 | 3.4279727 |
| 2614 | 3.4173056 | 2647 | 3.4227539 | 2680 | 3.4281348 |
| 2615 | 3.4174717 | 2648 | 3.4229180 | 2681 | 3.4282968 |
| 2616 | 3.4176377 | 2649 | 3.4230820 | 2682 | 3.4284588 |
| 2617 | 3.4178037 | 2650 | 3.4232459 | 2683 | 3.4286207 |
| 2618 | 3.4179696 | 2651 | 3.4234097 | 2684 | 3.4287825 |
| 2619 | 3.4181355 | 2652 | 3.4235735 | 2685 | 3.4289443 |
| 2620 | 3.4183013 | 2653 | 3.4237372 | 2686 | 3.4291060 |
| 2621 | 3.4184670 | 2654 | 3.4239009 | 2687 | 3.4292677 |
| 2622 | 3.4186327 | 2655 | 3.4240645 | 2688 | 3.4294293 |
| 2623 | 3.4187983 | 2656 | 3.4242281 | 2689 | 3.4295908 |
| 2624 | 3.4189638 | 2657 | 3.4243916 | 2690 | 3.4297523 |
| 2625 | 3.4191293 | 2658 | 3.4245550 | 2691 | 3.4299137 |
| 2626 | 3.4192947 | 2659 | 3.4247183 | 2692 | 3.4300751 |
| 2627 | 3.4194601 | 2660 | 3.4248816 | 2693 | 3.4302364 |
| 2628 | 3.4196254 | 2661 | 3.4250449 | 2694 | 3.4303976 |
| 2629 | 3.4197906 | 2662 | 3.4252080 | 2695 | 3.4305588 |
| 2630 | 3.4199557 | 2663 | 3.4253712 | 2696 | 3.4307199 |
| 2631 | 3.4201208 | 2664 | 3.4255342 | 2697 | 3.4308809 |
| 2632 | 3.4202859 | 2665 | 3.4256972 | 2698 | 3.4310419 |
| 2633 | 3.4204509 | 2666 | 3.4258601 | 2699 | 3.4312029 |
| 2634 | 3.4206158 | 2667 | 3.4260230 | 2700 | 3.4313638 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 2701 | 3.4315246 | 2734 | 3.4367985 | 2767 | 3.4420092 |
| 2702 | 3.4316853 | 2735 | 3.4369573 | 2768 | 3.4421661 |
| 2703 | 3.4318460 | 2736 | 3.4371161 | 2769 | 3.4423229 |
| 2704 | 3.4320067 | 2737 | 3.4372748 | 2770 | 3.4424798 |
| 2705 | 3.4321673 | 2738 | 3.4374334 | 2771 | 3.4426365 |
| 2706 | 3.4323278 | 2739 | 3.4375920 | 2772 | 3.4427932 |
| 2707 | 3.4324882 | 2740 | 3.4377506 | 2773 | 3.4429499 |
| 2708 | 3.4326487 | 2741 | 3.4379090 | 2774 | 3.4431065 |
| 2709 | 3.4328090 | 2742 | 3.4380674 | 2775 | 3.4432630 |
| 2710 | 3.4329693 | 2743 | 3.4382258 | 2776 | 3.4434195 |
| 2711 | 3.4331295 | 2744 | 3.4383841 | 2777 | 3.4435759 |
| 2712 | 3.4332897 | 2745 | 3.4385423 | 2778 | 3.4437322 |
| 2713 | 3.4334498 | 2746 | 3.4387005 | 2779 | 3.4438885 |
| 2714 | 3.4336098 | 2747 | 3.4388587 | 2780 | 3.4440448 |
| 2715 | 3.4337698 | 2748 | 3.4390167 | 2781 | 3.4442010 |
| 2716 | 3.4339298 | 2749 | 3.4391747 | 2782 | 3.4443571 |
| 2717 | 3.4340896 | 2750 | 3.4393327 | 2783 | 3.4445132 |
| 2718 | 3.4342494 | 2751 | 3.4394906 | 2784 | 3.4446692 |
| 2719 | 3.4344092 | 2752 | 3.4396484 | 2785 | 3.4448252 |
| 2720 | 3.4345689 | 2753 | 3.4398062 | 2786 | 3.4449811 |
| 2721 | 3.4347285 | 2754 | 3.4399639 | 2787 | 3.4451370 |
| 2722 | 3.4348881 | 2755 | 3.4401216 | 2788 | 3.4452928 |
| 2723 | 3.4350476 | 2756 | 3.4402792 | 2789 | 3.4454485 |
| 2724 | 3.4352071 | 2757 | 3.4404368 | 2790 | 3.4456042 |
| 2725 | 3.4353665 | 2758 | 3.4405943 | 2791 | 3.4457598 |
| 2726 | 3.4355258 | 2759 | 3.4407517 | 2792 | 3.4459154 |
| 2727 | 3.4356851 | 2760 | 3.4409091 | 2793 | 3.4460709 |
| 2728 | 3.4358444 | 2761 | 3.4410664 | 2794 | 3.4462264 |
| 2729 | 3.4360035 | 2762 | 3.4412237 | 2795 | 3.4463818 |
| 2730 | 3.4361626 | 2763 | 3.4413809 | 2796 | 3.4465372 |
| 2731 | 3.4363217 | 2764 | 3.4415380 | 2797 | 3.4466925 |
| 2732 | 3.4364807 | 2765 | 3.4416951 | 2798 | 3.4468477 |
| 2733 | 3.4366396 | 2766 | 3.4418522 | 2799 | 3.4470029 |
| 2734 | 3.4367985 | 2767 | 3.4420092 | 2800 | 3.4471580 |

| N. | Logarit. | N. | Logarit | N. | Logarit. |
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| 2801 | 3.4473131 | 2834 | 3.4523998 | 2867 | 3.4574277 |
| 2802 | 3.4474681 | 2835 | 3.4525531 | 2868 | 3.4575791 |
| 2803 | 3.4476231 | 2836 | 3.4527062 | 2869 | 3.4577305 |
| 2804 | 3.4477780 | 2837 | 3.4528593 | 2870 | 3.4578819 |
| 2805 | 3.4479329 | 2838 | 3.4530124 | 2871 | 3.4580332 |
| 2806 | 3.4480877 | 2839 | 3.4531654 | 2872 | 3.4581844 |
| 2807 | 3.4482424 | 2840 | 3.4533183 | 2873 | 3.4583356 |
| 2808 | 3.4483971 | 2841 | 3.4534712 | 2874 | 3.4584867 |
| 2809 | 3.4485517 | 2842 | 3.4536241 | 2875 | 3.4586378 |
| 2810 | 3.4487063 | 2843 | 3.4537769 | 2876 | 3.4587889 |
| 2811 | 3.4488608 | 2844 | 3.4539296 | 2877 | 3.4589399 |
| 2812 | 3.4490153 | 2845 | 3.4540823 | 2878 | 3.4590908 |
| 2813 | 3.4491697 | 2846 | 3.4542349 | 2879 | 3.4592417 |
| 2814 | 3.4493241 | 2847 | 3.4543875 | 2880 | 3.4593925 |
| 2815 | 3.4494784 | 2848 | 3.4545400 | 2681 | 3.4595433 |
| 2816 | 3.4496326 | 2849 | 3.4546924 | 2882 | 3.4596940 |
| 2817 | 3.4497868 | 2850 | 3.4548449 | 2883 | 3.4598446 |
| 2818 | 3.4499410 | 2851 | 3.4549972 | 2884 | 3.4599953 |
| 2819 | 3.4500951 | 2852 | 3.4551495 | 2885 | 3.4601458 |
| 2820 | 3.4502491 | 2853 | 3.4553018 | 2886 | 3.4602963 |
| 2821 | 3.4504031 | 2854 | 3.4554540 | 2887 | 3.4604468 |
| 2822 | 3.4505570 | 2855 | 3.4556061 | 2888 | 3.4605972 |
| 2823 | 3.4507109 | 2856 | 3.4557582 | 2889 | 3.4607475 |
| 2824 | 3.4508647 | 2857 | 3.4559102 | 2890 | 3.4608978 |
| 2825 | 3.4510184 | 2858 | 3.4560622 | 2891 | 3.4610481 |
| 2826 | 3.4511721 | 2859 | 3.4562142 | 2892 | 3.4611983 |
| 2827 | 3.4513258 | 2860 | 3.4563660 | 2893 | 3.4613484 |
| 2828 | 3.4514794 | 2861 | 3.4565179 | 2844 | 3.4614985 |
| 2829 | 3.4516329 | 2862 | 3.4566696 | 2895 | 3.4616486 |
| 2830 | 3.4517864 | 2863 | 3.4568213 | 2896 | 3.4617986 |
| 2831 | 3.4519399 | 2864 | 3.4569730 | 2897 | 3.4619485 |
| 2832 | 3.4520932 | 2865 | 3.4571246 | 2898 | 3.4620984 |
| 2833 | 3.4522466 | 2866 | 3.4572762 | 2899 | 3.4622482 |
| 2834 | 3.4523998 | 2867 | 3.4574277 | 2900 | 3.4623980 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 2901 | 3.4625477 | 2934 | 3.4674601 | 2967 | 3.4723175 |
| 2902 | 3.4626974 | 2935 | 3.4676081 | 2968 | 3.4724639 |
| 2903 | 3.4628470 | 2936 | 3.4677560 | 2969 | 3.4726102 |
| 2904 | 3.4629966 | 2937 | 3.4679039 | 2970 | 3.4727564 |
| 2905 | 3.4631461 | 2938 | 3.4680518 | 2971 | 3.4729027 |
| 2906 | 3.4632956 | 2939 | 3.4681996 | 2972 | 3.4730488 |
| 2907 | 3.4634450 | 2940 | 3.4683473 | 2973 | 3.4731949 |
| 2908 | 3.4635944 | 2941 | 3.4684950 | 2974 | 3.4733410 |
| 2909 | 3.4637437 | 2942 | 3.4686427 | 2975 | 3.4734870 |
| 2910 | 3.4638930 | 2943 | 3.4687903 | 2976 | 3.4736329 |
| 2911 | 3.4640422 | 2944 | 3.4689378 | 2977 | 3.4737788 |
| 2912 | 3.4641914 | 2945 | 3.4690853 | 2978 | 3.4739247 |
| 2913 | 3.4643405 | 2946 | 3.4692327 | 2979 | 3.4740705 |
| 2914 | 3.4644895 | 2947 | 3.4693801 | 2980 | 3.4742163 |
| 2915 | 3.4646386 | 2948 | 3.4695275 | 2981 | 3.4743620 |
| 2916 | 3.4647875 | 2949 | 3.4696748 | 2982 | 3.4745076 |
| 2917 | 3.4649364 | 2950 | 3.4698220 | 2983 | 3.4746533 |
| 2918 | 3.4650853 | 2951 | 3.4699692 | 2984 | 3.4747988 |
| 2919 | 3.4652341 | 2952 | 3.4701163 | 2985 | 3.4749443 |
| 2920 | 3.4653828 | 2953 | 3.4702634 | 2986 | 3.4750898 |
| 2921 | 3.4655316 | 2954 | 3.4704105 | 2987 | 3.4752352 |
| 2922 | 3.4656802 | 2955 | 3.4705575 | 2988 | 3.4753806 |
| 2923 | 3.4658288 | 2956 | 3.4707044 | 2989 | 3.4755259 |
| 2924 | 3.4659774 | 2957 | 3.4708513 | 2990 | 3.4756712 |
| 2925 | 3.4661259 | 2958 | 3.4709982 | 2991 | 3.4758164 |
| 2926 | 3.4662743 | 2959 | 3.4711450 | 2992 | 3.4759616 |
| 2927 | 3.4664227 | 2960 | 3.4712917 | 2993 | 3.4761067 |
| 2928 | 3.4665711 | 2961 | 3.4714384 | 2994 | 3.4762518 |
| 2929 | 3.4667194 | 2962 | 3.4715851 | 2995 | 3.4763968 |
| 2930 | 3.4668676 | 2963 | 3.4717317 | 2996 | 3.4765418 |
| 2931 | 3.4670158 | 2964 | 3.4718782 | 2997 | 3.4766867 |
| 2932 | 3.4671640 | 2965 | 3.4720247 | 2998 | 3.4768316 |
| 2933 | 3.4673121 | 2966 | 3.4721711 | 2999 | 3.4769765 |
| 2934 | 3.4674601 | 2967 | 3.4723175 | 3000 | 3.4771212 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3001 | 3.4772660 | 3034 | 3.4820156 | 3067 | 3.4867138 |
| 3002 | 3.4774107 | 3035 | 3.4821587 | 3068 | 3.4868554 |
| 3003 | 3.4775553 | 3036 | 3.4823018 | 3069 | 3.4869969 |
| 3004 | 3.4776999 | 3037 | 3.4824448 | 3070 | 3.4871384 |
| 3005 | 3.4778445 | 3038 | 3.4825878 | 3071 | 3.4872798 |
| 3006 | 3.4779890 | 3039 | 3.4827307 | 3072 | 3.4874212 |
| 3007 | 3.4781334 | 3040 | 3.4828736 | 3073 | 3.4875626 |
| 3008 | 3.4782778 | 3041 | 3.4830164 | 3074 | 3.4877039 |
| 3009 | 3.4784222 | 3042 | 3.4831592 | 3075 | 3.4878451 |
| 3010 | 3.4785665 | 3043 | 3.4833019 | 3076 | 3.4879863 |
| 3011 | 3.4787108 | 3044 | 3.4834446 | 3077 | 3.4881275 |
| 3012 | 3.4788550 | 3045 | 3.4835873 | 3078 | 3.4882686 |
| 3013 | 3.4789991 | 3046 | 3.4837299 | 3079 | 3.4884097 |
| 3014 | 3.4791432 | 3047 | 3.4838725 | 3080 | 3.4885507 |
| 3015 | 3.4792873 | 3048 | 3.4840150 | 3081 | 3.4886917 |
| 3016 | 3.4794313 | 3049 | 3.4841574 | 3082 | 3.4888326 |
| 3017 | 3.4795753 | 3050 | 3.4842998 | 3083 | 3.4889735 |
| 3018 | 3.4797192 | 3051 | 3.4844422 | 3084 | 3.4891144 |
| 3019 | 3.4798631 | 3052 | 3.4845845 | 3085 | 3.4892552 |
| 3020 | 3.4800069 | 3053 | 3.4847268 | 3086 | 3.4893959 |
| 3021 | 3.4801507 | 3054 | 3.4848690 | 3087 | 3.4895366 |
| 3022 | 3.4802945 | 3055 | 3.4850112 | 3088 | 3.4896773 |
| 3023 | 3.4804381 | 3056 | 3.4851533 | 3089 | 3.4898179 |
| 3024 | 3.4805818 | 3057 | 3.4852954 | 3090 | 3.4899585 |
| 3025 | 3.4807254 | 3058 | 3.4854375 | 3091 | 3.4900990 |
| 3026 | 3.4808689 | 3059 | 3.4855795 | 3092 | 3.4902395 |
| 3027 | 3.4810124 | 3060 | 3.4857214 | 3093 | 3.4903799 |
| 3028 | 3.4811559 | 3061 | 3.4858633 | 3094 | 3.4905203 |
| 3029 | 3.4812993 | 3062 | 3.4860052 | 3095 | 3.4906607 |
| 3030 | 3.4814426 | 3063 | 3.4861470 | 3096 | 3.4908009 |
| 3031 | 3.4815859 | 3064 | 3.4862888 | 3097 | 3.4909412 |
| 3032 | 3.4817292 | 3065 | 3.4864305 | 3098 | 3.4910814 |
| 3033 | 3.4818724 | 3066 | 3.4865721 | 3099 | 3.4912216 |
| 3034 | 3.4820156 | 3067 | 3.4867138 | 3100 | 3.4913617 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3101 | 3.4915018 | 3134 | 3.4960990 | 3167 | 3.5006481 |
| 3102 | 3.4916418 | 3135 | 3.4962375 | 3168 | 3.5007852 |
| 3103 | 3.4917818 | 3136 | 3.4963761 | 3169 | 3.5009222 |
| 3104 | 3.4919217 | 3137 | 3.4965145 | 3170 | 3.5010593 |
| 3105 | 3.4920616 | 3138 | 3.4966529 | 3171 | 3.5011962 |
| 3106 | 3.4922014 | 3139 | 3.4967913 | 3172 | 3.5013332 |
| 3107 | 3.4923413 | 3140 | 3.4969296 | 3173 | 3.5014701 |
| 3108 | 3.4924810 | 3141 | 3.4970679 | 3174 | 3.5016069 |
| 3109 | 3.4926207 | 3142 | 3.4972062 | 3175 | 3.5017437 |
| 3110 | 3.4927604 | 3143 | 3.4973444 | 3176 | 3.5018805 |
| 3111 | 3.4929000 | 3144 | 3.4974825 | 3177 | 3.5020172 |
| 3112 | 3.4930396 | 3145 | 3.4976206 | 3178 | 3.5021539 |
| 3113 | 3.4931791 | 3146 | 3.4977587 | 3179 | 3.5022905 |
| 3114 | 3.4933186 | 3147 | 3.4978967 | 3180 | 3.5024271 |
| 3115 | 3.4934580 | 3148 | 3.4980347 | 3181 | 3.5025637 |
| 3116 | 3.4935974 | 3149 | 3.4981727 | 3182 | 3.5027002 |
| 3117 | 3.4937368 | 3150 | 3.4983106 | 3183 | 3.5028366 |
| 3118 | 3.4938761 | 3151 | 3.4984484 | 3184 | 3.5029731 |
| 3119 | 3.4940154 | 3152 | 3.4985862 | 3185 | 3.5031094 |
| 3120 | 3.4941546 | 3153 | 3.4987240 | 3186 | 3.5032458 |
| 3121 | 3.4942938 | 3154 | 3.4988617 | 3187 | 3.5033821 |
| 3122 | 3.4944329 | 3155 | 3.4989994 | 3188 | 3.5035183 |
| 3123 | 3.4945720 | 3156 | 3.4991370 | 3189 | 3.5036545 |
| 3124 | 3.4947110 | 3157 | 3.4992746 | 3190 | 3.5037907 |
| 3125 | 3.4948500 | 3158 | 3.4994121 | 3191 | 3.5039268 |
| 3126 | 3.4949890 | 3159 | 3.4995496 | 3192 | 3.5040629 |
| 3127 | 3.4951279 | 3160 | 3.4996871 | 3193 | 3.5041989 |
| 3128 | 3.4952667 | 3161 | 3.4998245 | 3194 | 3.5043349 |
| 3129 | 3.4954056 | 3162 | 3.4999619 | 3195 | 3.5044709 |
| 3130 | 3.4955443 | 3163 | 3.5000992 | 3196 | 3.5046068 |
| 3131 | 3.4956831 | 3164 | 3.5002365 | 3197 | 3.5047426 |
| 3132 | 3.4958218 | 3165 | 3.5003737 | 3198 | 3.5048785 |
| 3133 | 3.4959604 | 3166 | 3.5005109 | 3199 | 3.5050142 |
| 3134 | 3.4960990 | 3167 | 3.5006481 | 3200 | 3.5051500 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3201 | 3.5052857 | 3234 | 3.5097400 | 3267 | 3.5141491 |
| 3202 | 3.5054213 | 3235 | 3.5098743 | 3268 | 3.5142820 |
| 3203 | 3.5055569 | 3236 | 3.5100085 | 3269 | 3.5144149 |
| 3204 | 3.5056925 | 3237 | 3.5101427 | 3270 | 3.5145478 |
| 3205 | 3.5058280 | 3238 | 3.5102768 | 3271 | 3.5146805 |
| 3206 | 3.5059635 | 3239 | 3.5104109 | 3272 | 3.5148133 |
| 3207 | 3.5060990 | 3240 | 3.5105450 | 3273 | 3.5149460 |
| 3208 | 3.5062344 | 3241 | 3.5106790 | 3274 | 3.5150787 |
| 3209 | 3.5063697 | 3242 | 3.5108130 | 3275 | 3.5152113 |
| 3210 | 3.5065050 | 3243 | 3.5109469 | 3276 | 3.5153439 |
| 3211 | 3.5066403 | 3244 | 3.5110808 | 3277 | 3.5154764 |
| 3212 | 3.5067755 | 3245 | 3.5112147 | 3278 | 3.5156089 |
| 3213 | 3.5069107 | 3246 | 3.5113485 | 3279 | 3.5157414 |
| 3214 | 3.5070459 | 3247 | 3.5114823 | 3280 | 3.5158738 |
| 3215 | 3.5071810 | 3248 | 3.5116160 | 3281 | 3.5160062 |
| 3216 | 3.5073160 | 3249 | 3.5117497 | 3282 | 3.5161386 |
| 3217 | 3.5074511 | 3250 | 3.5118834 | 3283 | 3.5162709 |
| 3218 | 3.5075860 | 3251 | 3.5120170 | 3284 | 3.5164031 |
| 3219 | 3.5077210 | 3252 | 3.5121505 | 3285 | 3.5165354 |
| 3220 | 3.5078559 | 3253 | 3.5122841 | 3286 | 3.5166676 |
| 3221 | 3.5079907 | 3254 | 3.5124175 | 3287 | 3.5167997 |
| 3222 | 3.5081255 | 3255 | 3.5125510 | 3288 | 3.5169318 |
| 3223 | 3.5082603 | 3256 | 3.5126844 | 3289 | 3.5170639 |
| 3224 | 3.5083950 | 3257 | 3.5128178 | 3290 | 3.5171959 |
| 3225 | 3.5085297 | 3258 | 3.5129511 | 3291 | 3.5173279 |
| 3226 | 3.5086644 | 3259 | 3.5130844 | 3292 | 3.5174598 |
| 3227 | 3.5087990 | 3260 | 3.5132176 | 3293 | 3.5175917 |
| 3228 | 3.5089335 | 3261 | 3.5133508 | 3294 | 3.5177236 |
| 3229 | 3.5090680 | 3262 | 3.5134840 | 3295 | 3.5178554 |
| 3230 | 3.5092025 | 3263 | 3.5136171 | 3296 | 3.5179872 |
| 3231 | 3.5093370 | 3264 | 3.5137501 | 3297 | 3.5181189 |
| 3232 | 3.5094713 | 3265 | 3.5138832 | 3298 | 3.5182506 |
| 3233 | 3.5096057 | 3266 | 3.5140162 | 3299 | 3.5183823 |
| 3234 | 3.5097400 | 3267 | 3.5141491 | 3300 | 3.5185139 |

| *N.* | *Logarit.* | *N.* | *Logarit.* | *N.* | *Logarit.* |
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| 3301 | 3.5186455 | 3334 | 3.5229656 | 3367 | 3.5272431 |
| 3302 | 3.5187771 | 3335 | 3.5230958 | 3368 | 3.5273721 |
| 3303 | 3.5189086 | 3336 | 3.5232260 | 3369 | 3.5275010 |
| 3304 | 3.5190400 | 3337 | 3.5233562 | 3370 | 3.5276299 |
| 3305 | 3.5191715 | 3338 | 3.5234863 | 3371 | 3.5277588 |
| 3306 | 3.5193028 | 3339 | 3.5236164 | 3372 | 3.5278876 |
| 3307 | 3.5194342 | 3340 | 3.5237465 | 3373 | 3.5280163 |
| 3308 | 3.5195655 | 3341 | 3.5238765 | 3374 | 3.5281451 |
| 3309 | 3.5196968 | 3342 | 3.5240064 | 3375 | 3.5282738 |
| 3310 | 3.5198280 | 3343 | 3.5241364 | 3376 | 3.5284024 |
| 3311 | 3.5199592 | 3344 | 3.5242663 | 3377 | 3.5285311 |
| 3312 | 3.5200903 | 3345 | 3.5243961 | 3378 | 3.5286596 |
| 3313 | 3.5202214 | 3346 | 3.5245259 | 3379 | 3.5287882 |
| 3314 | 3.5203525 | 3347 | 3.5246557 | 3380 | 3.5289167 |
| 3315 | 3.5204835 | 3348 | 3.5247854 | 3381 | 3.5290452 |
| 3316 | 3.5206145 | 3349 | 3.5249151 | 3382 | 3.5291736 |
| 3317 | 3.5207455 | 3350 | 3.5250448 | 3383 | 3.5293020 |
| 3318 | 3.5208764 | 3351 | 3.5251744 | 3384 | 3.5294303 |
| 3319 | 3.5210073 | 3352 | 3.5253040 | 3385 | 3.5295587 |
| 3320 | 3.5211381 | 3353 | 3.5254335 | 3386 | 3.5296869 |
| 3321 | 3.5212689 | 3354 | 3.5255631 | 3387 | 3.5298152 |
| 3322 | 3.5213996 | 3355 | 3.5256925 | 3388 | 3.5299434 |
| 3323 | 3.5215303 | 3356 | 3.5258219 | 3389 | 3.5300716 |
| 3324 | 3.5216610 | 3357 | 3.5259513 | 3390 | 3.5301997 |
| 3325 | 3.5217916 | 3358 | 3.5260807 | 3391 | 3.5303278 |
| 3326 | 3.5219222 | 3359 | 3.5262100 | 3392 | 3.5304558 |
| 3327 | 3.5220528 | 3360 | 3.5263393 | 3393 | 3.5305839 |
| 3328 | 3.5221833 | 3361 | 3.5264685 | 3394 | 3.5307118 |
| 3329 | 3.5223138 | 3362 | 3.5265977 | 3395 | 3.5308398 |
| 3330 | 3.5224442 | 3363 | 3.5267269 | 3396 | 3.5309677 |
| 3331 | 3.5225746 | 3364 | 3.5268560 | 3397 | 3.5310955 |
| 3332 | 3.5227050 | 3365 | 3.5269851 | 3398 | 3.5312234 |
| 3333 | 3.5228353 | 3366 | 3.5271141 | 3399 | 3.5313512 |
| 3334 | 3.5229656 | 3367 | 3.5272431 | 3400 | 3.5314789 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3401 | 3.5316066 | 3434 | 3.5358003 | 3467 | 3.5399538 |
| 3402 | 3.5317343 | 3435 | 3.5359267 | 3468 | 3.5400791 |
| 3403 | 3.5318619 | 3436 | 3.5360532 | 3469 | 3.5402043 |
| 3404 | 3.5319895 | 3437 | 3.5361795 | 3470 | 3.5403295 |
| 3405 | 3.5321171 | 3438 | 3.5363059 | 3471 | 3.5404546 |
| 3406 | 3.5322446 | 3439 | 3.5364322 | 3472 | 3.5405797 |
| 3407 | 3.5323721 | 3440 | 3.5365584 | 3473 | 3.5407048 |
| 3408 | 3.5324996 | 3441 | 3.5366847 | 3474 | 3.5408298 |
| 3409 | 3.5326270 | 3442 | 3.5368109 | 3475 | 3.5409548 |
| 3410 | 3.5327544 | 3443 | 3.5369370 | 3476 | 3.5410798 |
| 3411 | 3.5328817 | 3444 | 3.5370631 | 3477 | 3.5412047 |
| 3412 | 3.5330090 | 3445 | 3.5371892 | 3478 | 3.5413296 |
| 3413 | 3.5331363 | 3446 | 3.5373153 | 3479 | 3.5414544 |
| 3414 | 3.5332635 | 3447 | 3.5374413 | 3480 | 3.5415792 |
| 3415 | 3.5333907 | 3448 | 3.5375672 | 3481 | 3.5417040 |
| 3416 | 3.5335179 | 3449 | 3.5376932 | 3482 | 3.5418288 |
| 3417 | 3.5336450 | 3450 | 3.5378191 | 3483 | 3.5419535 |
| 3418 | 3.5337721 | 3451 | 3.5379450 | 3484 | 3.5420781 |
| 3419 | 3.5338991 | 3452 | 3.5380708 | 3485 | 3.5422028 |
| 3420 | 3.5340261 | 3453 | 3.5381966 | 3486 | 3.5423274 |
| 3421 | 3.5341531 | 3454 | 3.5383223 | 3487 | 3.5424519 |
| 3422 | 3.5342800 | 3455 | 3.5384481 | 3488 | 3.5425765 |
| 3423 | 3.5344069 | 3456 | 3.5385737 | 3489 | 3.5427010 |
| 3424 | 3.5345338 | 3457 | 3.5386994 | 3490 | 3.5428254 |
| 3425 | 3.5346606 | 3458 | 3.5388250 | 3491 | 3.5429498 |
| 3426 | 3.5347874 | 3459 | 3.5389506 | 3492 | 3.5430742 |
| 3427 | 3.5349141 | 3460 | 3.5390761 | 3493 | 3.5431986 |
| 3428 | 3.5350408 | 3461 | 3.5392016 | 3494 | 3.5433229 |
| 3429 | 3.5351675 | 3462 | 3.5393271 | 3495 | 3.5434472 |
| 3430 | 3.5352941 | 3463 | 3.5394525 | 3496 | 3.5435714 |
| 3431 | 3.5354207 | 3464 | 3.5395779 | 3497 | 3.5436956 |
| 3432 | 3.5355473 | 3465 | 3.5397032 | 3498 | 3.5438198 |
| 3433 | 3.5356738 | 3466 | 3.5398286 | 3499 | 3.5439439 |
| 3434 | 3.5358003 | 3467 | 3.5399538 | 3500 | 3.5440680 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3501 | 3.5441921 | 3534 | 3.5482665 | 3567 | 3.5523031 |
| 3502 | 3.5443161 | 3535 | 3.5483894 | 3568 | 3.5524248 |
| 3503 | 3.5444401 | 3536 | 3.5485123 | 3569 | 3.5525465 |
| 3504 | 3.5445641 | 3537 | 3.5486351 | 3570 | 3.5526682 |
| 3505 | 3.5446880 | 3538 | 3.5487578 | 3571 | 3.5527898 |
| 3506 | 3.5448119 | 3539 | 3.5488806 | 3572 | 3.5529114 |
| 3507 | 3.5449358 | 3540 | 3.5490033 | 3573 | 3.5530330 |
| 3508 | 3.5450596 | 3541 | 3.5491259 | 3574 | 3.5531545 |
| 3509 | 3.5451834 | 3542 | 3.5492486 | 3575 | 3.5532760 |
| 3510 | 3.3453071 | 3543 | 3.5493712 | 3576 | 3.5533975 |
| 3511 | 3.5454308 | 3544 | 3.5494937 | 3577 | 3.5535189 |
| 3512 | 3.5455545 | 3545 | 3.5496162 | 3578 | 3.5536403 |
| 3513 | 3.5456781 | 3546 | 3.5497387 | 3579 | 3.5537617 |
| 3514 | 3.5458018 | 3547 | 3.5498612 | 3580 | 3.5538830 |
| 3515 | 3.5459253 | 3548 | 3.5499836 | 3581 | 3.5540043 |
| 3516 | 3.5460489 | 3549 | 3.5501060 | 3582 | 3.5541256 |
| 3517 | 3.5461724 | 3550 | 3.5502283 | 3583 | 3.5542468 |
| 3518 | 3.5462958 | 3551 | 3.5503507 | 3584 | 3.5543680 |
| 3519 | 3.5464193 | 3552 | 3.5504730 | 3585 | 3.5544892 |
| 3520 | 3.5465427 | 3553 | 3.5505952 | 3586 | 3.5546103 |
| 3521 | 3.5466660 | 3554 | 3.5507174 | 3587 | 3.5547314 |
| 3522 | 3.5467894 | 3555 | 3.5508396 | 3588 | 3.5548524 |
| 3523 | 3.5469126 | 3556 | 3.5509618 | 3589 | 3.5549735 |
| 3524 | 3.5470359 | 3557 | 3.5510839 | 3590 | 3.5550944 |
| 3525 | 3.5471591 | 3558 | 3.5512059 | 3591 | 3.5552154 |
| 3526 | 3.5472823 | 3559 | 3.5513280 | 3592 | 3.5553363 |
| 3527 | 3.5474055 | 3560 | 3.5514500 | 3593 | 3.5554572 |
| 3528 | 3.5475286 | 3561 | 3.5515720 | 3594 | 3.5555781 |
| 3529 | 3.5476517 | 3562 | 3.5516939 | 3595 | 3.5556989 |
| 3530 | 3.5477747 | 3563 | 3.5518158 | 3596 | 3.5558197 |
| 3531 | 3.5478977 | 3564 | 3.5519377 | 3597 | 3.5559404 |
| 3532 | 3.5480207 | 3565 | 3.5520595 | 3598 | 3.5560612 |
| 3533 | 3.5481436 | 3566 | 3.5521813 | 3599 | 3.5561818 |
| 3534 | 3.5482665 | 3567 | 3.5123031 | 3600 | 3.5563025 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3601 | 3.5564231 | 3634 | 3.5603849 | 3667 | 3.5643109 |
| 3602 | 3.5565437 | 3635 | 3.5605044 | 3668 | 3.5644293 |
| 3603 | 3.5566643 | 3636 | 3.5606239 | 3669 | 3.5645477 |
| 3604 | 3.5567848 | 3637 | 3.5507433 | 3670 | 3.5646661 |
| 3605 | 3.5569053 | 3638 | 3.5608627 | 3671 | 3.5647844 |
| 3606 | 3.5570257 | 3639 | 3.5609820 | 3672 | 3.5649027 |
| 3607 | 3.5571461 | 3640 | 3.5611014 | 3673 | 3.5650209 |
| 3608 | 3.5572665 | 3641 | 3.5612207 | 3674 | 3.5651392 |
| 3609 | 3.5573869 | 3642 | 3.5613399 | 3675 | 3.5652573 |
| 3610 | 3.5575072 | 3643 | 3.5614592 | 3676 | 3.5653755 |
| 3611 | 3.5576275 | 3644 | 3.5615784 | 3677 | 3.5654936 |
| 3612 | 3.5577477 | 3645 | 3.5616975 | 3678 | 3.5656117 |
| 3613 | 3.5578680 | 3646 | 3.5618167 | 3679 | 3.5657298 |
| 3614 | 3.5579881 | 3647 | 3.5619358 | 3680 | 3.5658478 |
| 3615 | 3.5581083 | 3648 | 3.5620548 | 3681 | 3.5659658 |
| 3616 | 3.5582284 | 3649 | 3.5621739 | 3682 | 3.5660838 |
| 3617 | 3.5583485 | 3650 | 3.5622929 | 3683 | 3.5662017 |
| 3618 | 3.5584686 | 3651 | 3.5624118 | 3684 | 3.5663196 |
| 3619 | 3.5585886 | 3652 | 3.5625308 | 3685 | 3.5664375 |
| 3620 | 3.5587086 | 3653 | 3.5626497 | 3686 | 3.5665553 |
| 3621 | 3.5588285 | 3654 | 3.5627685 | 3687 | 3.5666731 |
| 3622 | 3.5589484 | 3655 | 3.5628874 | 3688 | 3.5667909 |
| 3623 | 3.5590683 | 3656 | 3.5630062 | 3689 | 3.5669087 |
| 3624 | 3.5591882 | 3657 | 3.5631250 | 3690 | 3.5670264 |
| 3625 | 3.5593080 | 3658 | 3.5632437 | 3691 | 3.5671440 |
| 3626 | 3.5594278 | 3659 | 3.5633624 | 3692 | 3.5672617 |
| 3627 | 3.5595476 | 3660 | 3.5634811 | 3693 | 3.5673793 |
| 3628 | 3.5596673 | 3661 | 3.5635997 | 3694 | 3.5674969 |
| 3629 | 3.5597870 | 3662 | 3.5637183 | 3695 | 3.5676144 |
| 3630 | 3.5599066 | 3663 | 3.5638369 | 3696 | 3.5677320 |
| 3631 | 3.5600262 | 3664 | 3.5639555 | 3697 | 3.5678494 |
| 3632 | 3.5601458 | 3665 | 3.5640740 | 3698 | 3.5679669 |
| 3633 | 3.5602654 | 3666 | 3.5641925 | 3699 | 3.5680843 |
| 3634 | 3.5603849 | 3667 | 3.5643109 | 3700 | 3.5682017 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3701 | 3.5683191 | 3734 | 3.5721743 | 3767 | 3.5759956 |
| 3702 | 3.5684364 | 3735 | 3.5722906 | 3768 | 3.5761109 |
| 3703 | 3.5685537 | 3736 | 3.5724069 | 3769 | 3.5762261 |
| 3704 | 3.5686710 | 3737 | 3.5725231 | 3770 | 3.5763413 |
| 3705 | 3.5687882 | 3738 | 3.5726393 | 3771 | 3.5764565 |
| 3706 | 3.5689054 | 3739 | 3.5727555 | 3772 | 3.5765717 |
| 3707 | 3.5690226 | 3740 | 3.5728716 | 3773 | 3.5766868 |
| 3708 | 3.5691397 | 3741 | 3.5729877 | 3774 | 3.5768019 |
| 3709 | 3.5692568 | 3742 | 3.5731038 | 3775 | 3.5769169 |
| 3710 | 3.5693739 | 3743 | 3.5732198 | 3776 | 3.5770320 |
| 3711 | 3.5694910 | 3744 | 3.5733358 | 3777 | 3.5771470 |
| 3712 | 3.5696080 | 3745 | 3.5734518 | 3778 | 3.5772620 |
| 3713 | 3.5697249 | 3746 | 3.5735678 | 3779 | 3.5773769 |
| 3714 | 3.5698419 | 3747 | 3.5736837 | 3780 | 3.5774918 |
| 3715 | 3.5699588 | 3748 | 3.5737996 | 3781 | 3.5776067 |
| 3716 | 3.5700757 | 3749 | 3.5739154 | 3782 | 3.5777215 |
| 3717 | 3.5701926 | 3750 | 3.5740313 | 3783 | 3.5778363 |
| 3718 | 3.5703094 | 3751 | 3.5741471 | 3784 | 3.5779511 |
| 3719 | 3.5704262 | 3752 | 3.5742628 | 3785 | 3.5780659 |
| 3720 | 3.5705429 | 3753 | 3.5743786 | 3786 | 3.5781806 |
| 3721 | 3.5706597 | 3754 | 3.5744943 | 3787 | 3.5782953 |
| 3722 | 3.5707764 | 3755 | 3.5746099 | 3788 | 3.5784100 |
| 3723 | 3.5708930 | 3756 | 3.5747256 | 3789 | 3.5785246 |
| 3724 | 3.5710097 | 3757 | 3.5748412 | 3790 | 3.5786392 |
| 3725 | 3.5711263 | 3758 | 3.5749568 | 3791 | 3.5787538 |
| 3726 | 3.5712428 | 3759 | 3.5750723 | 3792 | 3.5788683 |
| 3727 | 3.5713594 | 3760 | 3.5751878 | 3793 | 3.5789828 |
| 3728 | 3.5714759 | 3761 | 3.5753033 | 3794 | 3.5790973 |
| 3729 | 3.5715924 | 3762 | 3.5754188 | 3795 | 3.5792118 |
| 3730 | 3.5717088 | 3763 | 3.5755342 | 3796 | 3.5793262 |
| 3731 | 3.5718252 | 3764 | 3.5756496 | 3797 | 3.5794406 |
| 3732 | 3.5719416 | 3765 | 3.5757650 | 3798 | 3.5795550 |
| 3733 | 3.5720580 | 3766 | 3.5758803 | 3799 | 3.5796693 |
| 3734 | 3.5721743 | 3767 | 3.5759956 | 3800 | 3.5797836 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3801 | 3.5798979 | 3834 | 3.5836521 | 3867 | 3.5873742 |
| 3802 | 3.5800121 | 3835 | 3.5837654 | 3868 | 3.5874865 |
| 3803 | 3.5801263 | 3836 | 3.5838786 | 3869 | 3.5875987 |
| 3804 | 3.5802405 | 3837 | 3.5839918 | 3870 | 3.5877110 |
| 3805 | 3.5803547 | 3838 | 3.5841050 | 3871 | 3.5878232 |
| 3806 | 3.5804688 | 3839 | 3.5842181 | 3872 | 3.5879353 |
| 3807 | 3.5805829 | 3840 | 3.5843312 | 3873 | 3.5880475 |
| 3808 | 3.5806969 | 3841 | 3.5844443 | 3874 | 3.5881596 |
| 3809 | 3.5808110 | 3842 | 3.5845574 | 3875 | 3.5882717 |
| 3810 | 3.5809250 | 3843 | 3.5846704 | 3876 | 3.5883838 |
| 3811 | 3.5810389 | 3844 | 3.5847834 | 3877 | 3.5884958 |
| 3812 | 3.5811529 | 3845 | 3.5848963 | 3878 | 3.5886078 |
| 3813 | 3.5812668 | 3846 | 3.5850093 | 3879 | 3.5887198 |
| 3814 | 3.5813807 | 3847 | 3.5851222 | 3880 | 3.5888317 |
| 3815 | 3.5814945 | 3848 | 3.5852351 | 3881 | 3.5889436 |
| 3816 | 3.5816084 | 3849 | 3.5853479 | 3882 | 3.5890555 |
| 3817 | 3.5817222 | 3850 | 3.5854607 | 3883 | 3.5891674 |
| 3818 | 3.5818359 | 3851 | 3.5855735 | 3884 | 3.5892792 |
| 3819 | 3.5819497 | 3852 | 3.5856863 | 3885 | 3.5893910 |
| 3820 | 3.5820634 | 3853 | 3.5857990 | 3886 | 3.5895028 |
| 3821 | 3.5821770 | 3854 | 3.5859117 | 3887 | 3.5896145 |
| 3822 | 3.5822907 | 3855 | 3.5860244 | 3888 | 3.5897262 |
| 3823 | 3.5824043 | 3856 | 3.5861370 | 3889 | 3.5898379 |
| 3824 | 3.5825179 | 3857 | 3.5862496 | 3890 | 3.5899496 |
| 3825 | 3.5826314 | 3858 | 3.5863622 | 3891 | 3.5900612 |
| 3826 | 3.5827450 | 3859 | 3.5864748 | 3892 | 3.5901728 |
| 3827 | 3.5828585 | 3860 | 3.5865873 | 3893 | 3.5902844 |
| 3828 | 3.5829719 | 3861 | 3.5866998 | 3894 | 3.5903959 |
| 3829 | 3.5830854 | 3862 | 3.5868123 | 3895 | 3.5905075 |
| 3830 | 3.5831988 | 3863 | 3.5869247 | 3896 | 3.5906189 |
| 3831 | 3.5833122 | 3864 | 3.5870371 | 3897 | 3.5907304 |
| 3832 | 3.5834255 | 3865 | 3.5871495 | 3898 | 3.5908418 |
| 3833 | 3.5835388 | 3866 | 3.5872618 | 3899 | 3.5909532 |
| 3834 | 3.5836521 | 3867 | 3.5873742 | 3900 | 3.5910646 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 3901 | 3.5911759 | 3934 | 3.5948344 | 3967 | 3.5984622 |
| 3902 | 3.5912873 | 3935 | 3.5949447 | 3968 | 3.5985717 |
| 3903 | 3.5913985 | 3936 | 3.5950551 | 3969 | 3.5986811 |
| 3904 | 3.5915098 | 3937 | 3.5951654 | 3970 | 3.5987905 |
| 3905 | 3.5916210 | 3938 | 3.5952757 | 3971 | 3.5988999 |
| 3906 | 3.5917322 | 3939 | 3.5953860 | 3972 | 3.5990092 |
| 3907 | 3.5918434 | 3940 | 3.5954962 | 3973 | 3.5991186 |
| 3908 | 3.5919546 | 3941 | 3.5956064 | 3974 | 3.5992279 |
| 3909 | 3.5920657 | 3942 | 3.5957166 | 3975 | 3.5993371 |
| 3910 | 3.5921768 | 3943 | 3.5958268 | 3976 | 3.5994464 |
| 3911 | 3.5922878 | 3944 | 3.5959369 | 3977 | 3.5995556 |
| 3912 | 3.5923988 | 3945 | 3.5960470 | 3978 | 3.5996648 |
| 3913 | 3.5925098 | 3946 | 3.5961571 | 3979 | 3.5997739 |
| 3914 | 3.5926208 | 3947 | 3.5962671 | 3980 | 3.5998831 |
| 3915 | 3.5927318 | 3948 | 3.5963771 | 3981 | 3.5999922 |
| 3916 | 3.5928427 | 3949 | 3.5964871 | 3982 | 3.6001013 |
| 3917 | 3.5929536 | 3950 | 3.5965971 | 3983 | 3.6002103 |
| 3918 | 3.5930644 | 3951 | 3.5967070 | 3984 | 3.6003193 |
| 3919 | 3.5931753 | 3952 | 3.5968169 | 3985 | 3.6004283 |
| 3920 | 3.5932861 | 3953 | 3.5969268 | 3986 | 3.6005373 |
| 3921 | 3.5933968 | 3954 | 3.5970367 | 3987 | 3.6006462 |
| 3922 | 3.5935076 | 3955 | 3.5971465 | 3988 | 3.6007551 |
| 3923 | 3.5936183 | 3956 | 3.5972563 | 3989 | 3.6008640 |
| 3924 | 3.5937290 | 3957 | 3.5973660 | 3990 | 3.6009729 |
| 3925 | 3.5938397 | 3958 | 3.5974758 | 3991 | 3.6010817 |
| 3926 | 3.5939503 | 3959 | 3.5975855 | 3992 | 3.6011905 |
| 3927 | 3.5940609 | 3960 | 3.5976952 | 3993 | 3.6012993 |
| 3928 | 3.5941715 | 3961 | 3.5978048 | 3994 | 3.6014080 |
| 3929 | 3.5942820 | 3962 | 3.5979145 | 3995 | 3.6015168 |
| 3930 | 3.5943925 | 3963 | 3.5980241 | 3996 | 3.6016255 |
| 3931 | 3.5945030 | 3964 | 3.5981336 | 3997 | 3.6017341 |
| 3932 | 3.5946135 | 3965 | 3.5982432 | 3998 | 3.6018428 |
| 3933 | 3.5947239 | 3966 | 3.5983527 | 3999 | 3.6019514 |
| 3934 | 3.5948344 | 3967 | 3.5984622 | 4000 | 3.6020600 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 4001 | 3.6021685 | 4034 | 3.6057359 | 4067 | 3.6092742 |
| 4002 | 3.6022771 | 4035 | 3.6058435 | 4068 | 3.6093809 |
| 4003 | 3.6023856 | 4036 | 3.6059512 | 4069 | 3.6094877 |
| 4004 | 3.6024941 | 4037 | 3.6060587 | 4070 | 3.6095944 |
| 4005 | 3.6026025 | 4038 | 3.6061663 | 4071 | 3.6097011 |
| 4006 | 3.6027109 | 4039 | 3.6062738 | 4072 | 3.6098078 |
| 4007 | 3.6028193 | 4040 | 3.6063814 | 4073 | 3.6099144 |
| 4008 | 3.6029277 | 4041 | 3.6064888 | 4074 | 3.6100210 |
| 4009 | 3.6030361 | 4042 | 3.6065963 | 4075 | 3.6101276 |
| 4010 | 3.6031444 | 4043 | 3.6067037 | 4076 | 3.6102342 |
| 4011 | 3.6032527 | 4044 | 3.6068111 | 4077 | 3.6103407 |
| 4012 | 3.6033609 | 4045 | 3.6069185 | 4078 | 3.6104472 |
| 4013 | 3.6034692 | 4046 | 3.6070259 | 4079 | 3.6105537 |
| 4014 | 3.6035774 | 4047 | 3.6071332 | 4080 | 3.6106602 |
| 4015 | 3.6036855 | 4048 | 3.6072405 | 4081 | 3.6107666 |
| 4016 | 3.6037937 | 4049 | 3.6073478 | 4082 | 3.6108730 |
| 4017 | 3.6039018 | 4050 | 3.6074550 | 4083 | 3.6109794 |
| 4018 | 3.6040099 | 4051 | 3.6075622 | 4084 | 3.6110857 |
| 4019 | 3.6041180 | 4052 | 3.6076694 | 4085 | 3.6111921 |
| 4020 | 3.6042261 | 4053 | 3.6077766 | 4086 | 3.6112984 |
| 4021 | 3.6043341 | 4054 | 3.6078837 | 4087 | 3.6114046 |
| 4022 | 3.6044421 | 4055 | 3.6079909 | 4088 | 3.6115109 |
| 4023 | 3.6045500 | 4056 | 3.6080979 | 4089 | 3.6116171 |
| 4024 | 3.6046580 | 4057 | 3.6082050 | 4090 | 3.6117233 |
| 4025 | 3.6047659 | 4058 | 3.6083120 | 4091 | 3.6118295 |
| 4026 | 3.6048738 | 4059 | 3.6084190 | 4092 | 3.6119356 |
| 4027 | 3.6049816 | 4060 | 3.6085260 | 4093 | 3.6120417 |
| 4028 | 3.6050895 | 4061 | 3.6086330 | 4094 | 3.6121478 |
| 4029 | 3.6051973 | 4062 | 3.6087399 | 4095 | 3.6122539 |
| 4030 | 3.6053050 | 4063 | 3.6088468 | 4096 | 3.6123599 |
| 4031 | 3.6054128 | 4064 | 3.6089537 | 4097 | 3.6124660 |
| 4032 | 3.6055205 | 4065 | 3.6090605 | 4098 | 3.6125720 |
| 4033 | 3.6056282 | 4066 | 3.6091674 | 4099 | 3.6126779 |
| 4034 | 3.6057359 | 4067 | 3.6092742 | 4100 | 3.6127839 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 4101 | 3.6128898 | 4134 | 3.6163705 | 4167 | 3.6198235 |
| 4102 | 3.6129957 | 4135 | 3.6164755 | 4168 | 3.6199277 |
| 4103 | 3.6131015 | 4136 | 3.6165805 | 4169 | 3.6200319 |
| 4104 | 3.6132073 | 4137 | 3.6166855 | 4170 | 3.6201360 |
| 4105 | 3.6133132 | 4138 | 3.6167905 | 4171 | 3.6202402 |
| 4106 | 3.6134189 | 4139 | 3.6168954 | 4172 | 3.6203443 |
| 4107 | 3.6135247 | 4140 | 3.6170003 | 4173 | 3.6204484 |
| 4108 | 3.6136304 | 4141 | 3.6171052 | 4174 | 3.6205524 |
| 4109 | 3.6137361 | 4142 | 3.6172101 | 4175 | 3.6206565 |
| 4110 | 3.6138418 | 4143 | 3.6173149 | 4176 | 3.6207605 |
| 4111 | 3.6139475 | 4144 | 3.6174197 | 4177 | 3.6208645 |
| 4112 | 3.6140531 | 4145 | 3.6175245 | 4178 | 3.6209684 |
| 4113 | 3.6141587 | 4146 | 3.6176293 | 4179 | 3.6210724 |
| 4114 | 3.6142643 | 4147 | 3.6177340 | 4180 | 3.6211763 |
| 4115 | 3.6143698 | 4148 | 3.6178387 | 4181 | 3.6212802 |
| 4116 | 3.6144754 | 4149 | 3.6179434 | 4182 | 3.6213840 |
| 4117 | 3.6145809 | 4150 | 3.6180481 | 4183 | 3.6214879 |
| 4118 | 3.6146863 | 4151 | 3.6181527 | 4184 | 3.6215917 |
| 4119 | 3.6147918 | 4152 | 3.6182573 | 4185 | 3.6216955 |
| 4120 | 3.6148972 | 4153 | 3.6183619 | 4186 | 3.6217992 |
| 4121 | 3.6150026 | 4154 | 3.6184665 | 4187 | 3.6219030 |
| 4122 | 3.6151080 | 4155 | 3.6185710 | 4188 | 3.6220067 |
| 4123 | 3.6152133 | 4156 | 3.6186755 | 4189 | 3.6221104 |
| 4124 | 3.6153187 | 4157 | 3.6187800 | 4190 | 3.6222140 |
| 4125 | 3.6154240 | 4158 | 3.6188845 | 4191 | 3.6223177 |
| 4126 | 3.6155292 | 4159 | 3.6189889 | 4192 | 3.6224213 |
| 4127 | 3.6156345 | 4160 | 3.6190933 | 4193 | 3.6225249 |
| 4128 | 3.6157397 | 4161 | 3.6191977 | 4194 | 3.6226284 |
| 4129 | 3.6158449 | 4162 | 3.6193021 | 4195 | 3.6227320 |
| 4130 | 3.6159501 | 4163 | 3.6194064 | 4196 | 3.6228355 |
| 4131 | 3.6160552 | 4164 | 3.6195107 | 4197 | 3.6229390 |
| 4132 | 3.6161603 | 4165 | 3.6196150 | 4198 | 3.6230424 |
| 4133 | 3.6162654 | 4166 | 3.6197193 | 4199 | 3.6231459 |
| 4134 | 3.6163705 | 4167 | 3.6198235 | 4200 | 3.6232493 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 4201 | 3.6233527 | 4234 | 3.6267509 | 4267 | 3.6301226 |
| 4202 | 3.6234560 | 4235 | 3.6268534 | 4268 | 3.6302244 |
| 4203 | 3.6235594 | 4236 | 3.6269559 | 4269 | 3.6303262 |
| 4204 | 3.6236627 | 4237 | 3.6270585 | 4270 | 3.6304279 |
| 4205 | 3.6237660 | 4238 | 3.6271610 | 4271 | 3.6305296 |
| 4206 | 3.6238693 | 4239 | 3.6272634 | 4272 | 3.6306312 |
| 4207 | 3.6239725 | 4240 | 3.6273659 | 4273 | 3.6307329 |
| 4208 | 3.6240757 | 4241 | 3.6274683 | 4274 | 3.6308345 |
| 4209 | 3.6241789 | 4242 | 3.6275707 | 4275 | 3.6309361 |
| 4210 | 3.6242821 | 4243 | 3.6276730 | 4276 | 3.6310377 |
| 4211 | 3.6243852 | 4244 | 3.6277754 | 4277 | 3.6311392 |
| 4212 | 3.6244884 | 4245 | 3.6278777 | 4278 | 3.6312408 |
| 4213 | 3.6245915 | 4246 | 3.6279800 | 4279 | 3.6313423 |
| 4214 | 3.6246945 | 4247 | 3.6280823 | 4280 | 3.6314438 |
| 4215 | 3.6247976 | 4248 | 3.6281845 | 4281 | 3.6315452 |
| 4216 | 3.6249006 | 4249 | 3.6282867 | 4282 | 3.6316467 |
| 4217 | 3.6250036 | 4250 | 3.6283889 | 4283 | 3.6317481 |
| 4218 | 3.6251066 | 4251 | 3.6284911 | 4284 | 3.6318495 |
| 4219 | 3.6252095 | 4252 | 3.6285933 | 4285 | 3.6319508 |
| 4220 | 3.6253124 | 4253 | 3.6286954 | 4286 | 3.6320522 |
| 4221 | 3.6254153 | 4254 | 3.6287975 | 4287 | 3.6321535 |
| 4222 | 3.6255182 | 4255 | 3.6288996 | 4288 | 3.6322548 |
| 4223 | 3.6256211 | 4256 | 3.6290016 | 4289 | 3.6323560 |
| 4224 | 3.6257239 | 4257 | 3.6291036 | 4290 | 3.6324573 |
| 4225 | 3.6258267 | 4258 | 3.6292057 | 4291 | 3.6325585 |
| 4226 | 3.6259295 | 4259 | 3.6293076 | 4292 | 3.6326597 |
| 4227 | 3.6260322 | 4260 | 3.6294096 | 4293 | 3.6327609 |
| 4228 | 3.6261350 | 4261 | 3.6295115 | 4294 | 3.6328620 |
| 4229 | 3.6262377 | 4262 | 3.6296134 | 4295 | 3.6329632 |
| 4230 | 3.6263404 | 4263 | 3.6297153 | 4296 | 3.6330643 |
| 4231 | 3.6264430 | 4264 | 3.6298172 | 4297 | 3.6331653 |
| 4232 | 3.6265457 | 4265 | 3.6299190 | 4298 | 3.6332664 |
| 4233 | 3.6266483 | 4266 | 3.6300208 | 4299 | 3.6333674 |
| 4234 | 3.6267509 | 4267 | 3.6301226 | 4300 | 3.6334685 |

| *N.* | *Logarit.* | *N.* | *Logarit.* | *N.* | *Logarit.* |
|---|---|---|---|---|---|
| 4301 | 3.6335694 | 4334 | 3.6368889 | 4367 | 3.6401832 |
| 4302 | 3.6336704 | 4335 | 3.6369891 | 4368 | 3.6402826 |
| 4303 | 3.6337713 | 4336 | 3.6370893 | 4369 | 3.6403820 |
| 4304 | 3.6338723 | 4337 | 3.6371894 | 4370 | 3.6404814 |
| 4305 | 3.6339732 | 4338 | 3.6372895 | 4371 | 3.6405808 |
| 4306 | 3.6340740 | 4339 | 3.6373896 | 4372 | 3.6406802 |
| 4307 | 3.6341749 | 4340 | 3.6374897 | 4373 | 3.6407795 |
| 4308 | 3.6342757 | 4341 | 3.6375898 | 4374 | 3.6408788 |
| 4309 | 3.6343765 | 4342 | 3.6376898 | 4375 | 3.6409781 |
| 4310 | 3.6344773 | 4343 | 3.6377898 | 4376 | 3.6410773 |
| 4311 | 3.6345780 | 4344 | 3.6378898 | 4377 | 3.6411765 |
| 4312 | 3.6346788 | 4345 | 3.6379898 | 4378 | 3.6412758 |
| 4313 | 3.6347795 | 4346 | 3.6380897 | 4379 | 3.6413749 |
| 4314 | 3.6348801 | 4347 | 3.6381896 | 4380 | 3.6414741 |
| 4315 | 3.6349808 | 4348 | 3.6382895 | 4381 | 3.6415733 |
| 4316 | 3.6350814 | 4349 | 3.6383894 | 4382 | 3.6416724 |
| 4317 | 3.6351820 | 4350 | 3.6384893 | 4383 | 3.6417715 |
| 4318 | 3.6352826 | 4351 | 3.6385891 | 4384 | 3.6418705 |
| 4319 | 3.6353832 | 4352 | 3.6386889 | 4385 | 3.6419696 |
| 4320 | 3.6354837 | 4353 | 3.6387887 | 4386 | 3.6420686 |
| 4321 | 3.6355843 | 4354 | 3.6388884 | 4387 | 3.6421676 |
| 4322 | 3.6356848 | 4355 | 3.6389882 | 4388 | 3.6422666 |
| 4323 | 3.6357852 | 4356 | 3.6390879 | 4389 | 3.6423656 |
| 4324 | 3.6358857 | 4357 | 3.6391876 | 4390 | 3.6424645 |
| 4325 | 3.6359861 | 4358 | 3.6392872 | 4391 | 3.6425634 |
| 4326 | 3.6360865 | 4359 | 3.6393869 | 4392 | 3.6426623 |
| 4327 | 3.6361869 | 4360 | 3.6394865 | 4393 | 3.6427612 |
| 4328 | 3.6362872 | 4361 | 3.6395861 | 4394 | 3.6428601 |
| 4329 | 3.6363876 | 4362 | 3.6396857 | 4395 | 3.6429589 |
| 4330 | 3.6364879 | 4363 | 3.6397852 | 4396 | 3.6430577 |
| 4331 | 3.6365882 | 4364 | 3.6398847 | 4397 | 3.6431565 |
| 4332 | 3.6366884 | 4365 | 3.6399842 | 4398 | 3.6432552 |
| 4333 | 3.6367887 | 4366 | 3.6400837 | 4399 | 3.6433540 |
| 4334 | 3.6368889 | 4367 | 3.6401832 | 4400 | 3.6434527 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 4401 | 3.6435514 | 4434 | 3.6467957 | 4467 | 3.6500160 |
| 4402 | 3.6436500 | 4435 | 3.6468936 | 4468 | 3.6501132 |
| 4403 | 3.6437487 | 4436 | 3.6469915 | 4469 | 3.6502104 |
| 4404 | 3.6438473 | 4437 | 3.6470894 | 4470 | 3.6503075 |
| 4405 | 3.6439459 | 4438 | 3.6471873 | 4471 | 3.6504047 |
| 4406 | 3.6440445 | 4439 | 3.6472851 | 4472 | 3.6505018 |
| 4407 | 3.6441430 | 4440 | 3.6473830 | 4473 | 3.6505989 |
| 4408 | 3.6442416 | 4441 | 3.6474808 | 4474 | 3.6506960 |
| 4409 | 3.6443401 | 4442 | 3.6475785 | 4475 | 3.6507930 |
| 4410 | 3.6444386 | 4443 | 3.6476763 | 4476 | 3.6508901 |
| 4411 | 3.6445371 | 4444 | 3.6477740 | 4477 | 3.6509871 |
| 4412 | 3.6446355 | 4445 | 3.6478718 | 4478 | 3.6510841 |
| 4413 | 3.6447339 | 4446 | 3.6479695 | 4479 | 3.6511811 |
| 4414 | 3.6448323 | 4447 | 3.6480671 | 4480 | 3.6512780 |
| 4415 | 3.6449307 | 4448 | 3.6481648 | 4481 | 3.6513749 |
| 4416 | 3.6450291 | 4449 | 3.6482624 | 4482 | 3.6514719 |
| 4417 | 3.6451274 | 4450 | 3.6483600 | 4483 | 3.6515687 |
| 4418 | 3.6452257 | 4451 | 3.6484576 | 4484 | 3.6516656 |
| 4419 | 3.6453240 | 4452 | 3.6485552 | 4485 | 3.6517624 |
| 4420 | 3.6454223 | 4453 | 3.6486527 | 4486 | 3.6518593 |
| 4421 | 3.6455205 | 4454 | 3.6487502 | 4487 | 3.6519561 |
| 4422 | 3.6456187 | 4455 | 3.6488477 | 4488 | 3.6520528 |
| 4423 | 3.6457169 | 4456 | 3.6489452 | 4489 | 3.6521496 |
| 4424 | 3.6458151 | 4457 | 3.6490426 | 4490 | 3.6522463 |
| 4425 | 3.6459133 | 4458 | 3.6491401 | 4491 | 3.6523430 |
| 4426 | 3.6460114 | 4459 | 3.6492375 | 4492 | 3.6524397 |
| 4427 | 3.6461095 | 4460 | 3.6493349 | 4493 | 3.6525364 |
| 4428 | 3.6462076 | 4461 | 3.6494322 | 4494 | 3.6526331 |
| 4429 | 3.6463057 | 4462 | 3.6495296 | 4495 | 3.6527297 |
| 4430 | 3.6464037 | 4463 | 3.6496269 | 4496 | 3.6528263 |
| 4431 | 3.6465017 | 4464 | 3.6497242 | 4497 | 3.6529229 |
| 4432 | 3.6465997 | 4465 | 3.6498215 | 4498 | 3.6530195 |
| 4433 | 3.6466977 | 4466 | 3.6499187 | 4499 | 3.6531160 |
| 4434 | 3.6467957 | 4467 | 3.6500160 | 4500 | 3.6532125 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 4501 | 3.6533090 | 4534 | 3.6564815 | 4567 | 3.6596310 |
| 4502 | 3.6534055 | 4535 | 3.6565773 | 4568 | 3.6597261 |
| 4503 | 3.6535019 | 4536 | 3.6566730 | 4569 | 3.6598212 |
| 4504 | 3.6535984 | 4537 | 3.6567688 | 4570 | 3.6599162 |
| 4505 | 3.6536948 | 4538 | 3.6568645 | 4571 | 3.6600112 |
| 4506 | 3.6537912 | 4539 | 3.6569602 | 4572 | 3.6601062 |
| 4507 | 3.6538876 | 4540 | 3.6570559 | 4573 | 3.6602012 |
| 4508 | 3.6539839 | 4541 | 3.6571515 | 4574 | 3.6602962 |
| 4509 | 3.6540802 | 4542 | 3.6572471 | 4575 | 3.6603911 |
| 4510 | 3.6541765 | 4543 | 3.6573427 | 4576 | 3.6604860 |
| 4511 | 3.6542728 | 4544 | 3.6574383 | 4577 | 3.6605809 |
| 4512 | 3.6543691 | 4545 | 3.6575339 | 4578 | 3.6606758 |
| 4513 | 3.6544653 | 4546 | 3.6576294 | 4579 | 3.6607706 |
| 4514 | 3.6545616 | 4547 | 3.6577250 | 4580 | 3.6608655 |
| 4515 | 3.6546578 | 4548 | 3.6578205 | 4581 | 3.6609603 |
| 4516 | 3.6547539 | 4549 | 3.6579159 | 4582 | 3.6610551 |
| 4517 | 3.6548501 | 4550 | 3.6580114 | 4583 | 3.6611499 |
| 4518 | 3.6549462 | 4551 | 3.6581068 | 4584 | 3.6612446 |
| 4519 | 3.6550423 | 4552 | 3.6582023 | 4585 | 3.6613393 |
| 4520 | 3.6551384 | 4553 | 3.6582976 | 4586 | 3.6614340 |
| 4521 | 3.6552345 | 4554 | 3.6583930 | 4587 | 3.6615287 |
| 4522 | 3.6553306 | 4555 | 3.6584884 | 4588 | 3.6616234 |
| 4523 | 3.6554266 | 4556 | 3.6585837 | 4589 | 3.6617181 |
| 4524 | 3.6555226 | 4557 | 3.6586790 | 4590 | 3.6618127 |
| 4525 | 3.6556186 | 4558 | 3.6587743 | 4591 | 3.6619073 |
| 4526 | 3.6557145 | 4559 | 3.6588696 | 4592 | 3.6620019 |
| 4527 | 3.6558105 | 4560 | 3.6589648 | 4593 | 3.6620964 |
| 4528 | 3.6559064 | 4561 | 3.6590601 | 4594 | 3.6621910 |
| 4529 | 3.6560023 | 4562 | 3.6591553 | 4595 | 3.6622855 |
| 4530 | 3.6560982 | 4563 | 3.6592505 | 4596 | 3.6623800 |
| 4531 | 3.6561941 | 4564 | 3.6593456 | 4597 | 3.6624745 |
| 4532 | 3.6562899 | 4565 | 3.6594408 | 4598 | 3.6625690 |
| 4533 | 3.6563857 | 4566 | 3.6595359 | 4599 | 3.6626634 |
| 4534 | 3.6564815 | 4567 | 3.6596310 | 4600 | 3.6627578 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 4601 | 3.6628522 | 4634 | 3.6659560 | 4667 | 3.6690378 |
| 4602 | 3.6629466 | 4635 | 3.6660497 | 4668 | 3.6691308 |
| 4603 | 3.6630410 | 4636 | 3.6661434 | 4669 | 3.6692239 |
| 4604 | 3.6631353 | 4637 | 3.6662371 | 4670 | 3.6693169 |
| 4605 | 3.6632296 | 4638 | 3.6663307 | 4671 | 3.6694099 |
| 4606 | 3.6633239 | 4639 | 3.6664244 | 4672 | 3.6695028 |
| 4607 | 3.6634182 | 4640 | 3.6665180 | 4673 | 3.6695958 |
| 4608 | 3.6635125 | 4641 | 3.6666116 | 4674 | 3.6696887 |
| 4609 | 3.6636067 | 4642 | 3.6667051 | 4675 | 3.6697816 |
| 4610 | 3.6637009 | 4643 | 3.6667987 | 4676 | 3.6698745 |
| 4611 | 3.6637951 | 4644 | 3.6668922 | 4677 | 3.6699674 |
| 4612 | 3.6638893 | 4645 | 3.6669857 | 4678 | 3.6700602 |
| 4613 | 3.6639835 | 4646 | 3.6670792 | 4679 | 3.6701530 |
| 4614 | 3.6640776 | 4647 | 3.6671727 | 4680 | 3.6702459 |
| 4615 | 3.6641717 | 4648 | 3.6672661 | 4681 | 3.6703386 |
| 4616 | 3.6642658 | 4649 | 3.6673595 | 4682 | 3.6704314 |
| 4617 | 3.6643599 | 4650 | 3.6674530 | 4683 | 3.6705242 |
| 4618 | 3.6644539 | 4651 | 3.6675463 | 4684 | 3.6706169 |
| 4619 | 3.6645480 | 4652 | 3.6676397 | 4685 | 3.6707096 |
| 4620 | 3.6646420 | 4653 | 3.6677331 | 4686 | 3.6708023 |
| 4621 | 3.6647360 | 4654 | 3.6678264 | 4687 | 3.6708950 |
| 4622 | 3.6648299 | 4655 | 3.6679197 | 4688 | 3.6709876 |
| 4623 | 3.6649239 | 4656 | 3.6680130 | 4689 | 3.6710802 |
| 4624 | 3.6650178 | 4657 | 3.6681062 | 4690 | 3.6711728 |
| 4625 | 3.6651117 | 4658 | 3.6681995 | 4691 | 3.6712654 |
| 4626 | 3.6652056 | 4659 | 3.6682927 | 4692 | 3.6713580 |
| 4627 | 3.6652995 | 4660 | 3.6683859 | 4693 | 3.6714506 |
| 4628 | 3.6653933 | 4661 | 3.6684791 | 4694 | 3.6715431 |
| 4629 | 3.6654872 | 4662 | 3.6685723 | 4695 | 3.6716356 |
| 4630 | 3.6655810 | 4663 | 3.6686654 | 4696 | 3.6717281 |
| 4631 | 3.6656748 | 4664 | 3.6687585 | 4697 | 3.6718206 |
| 4632 | 3.6657685 | 4665 | 3.6688516 | 4698 | 3.6719130 |
| 4633 | 3.6658623 | 4666 | 3.6689447 | 4699 | 3.6720054 |
| 4634 | 3.6659560 | 4667 | 3.6690378 | 4700 | 3.6720979 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 4701 | 3.6721903 | 4734 | 3.6752283 | 4767 | 3.6782452 |
| 4702 | 3.6722826 | 4735 | 3.6753200 | 4768 | 3.6783362 |
| 4703 | 3.6723750 | 4736 | 3.6754117 | 4769 | 3.6784273 |
| 4704 | 3.6724673 | 4737 | 3.6755034 | 4770 | 3.6785184 |
| 4705 | 3.6725596 | 4738 | 3.6755951 | 4771 | 3.6786094 |
| 4706 | 3.6726519 | 4739 | 3.6756867 | 4772 | 3.6787004 |
| 4707 | 3.6727442 | 4740 | 3.6757783 | 4773 | 3.6787914 |
| 4708 | 3.6728365 | 4741 | 3.6758700 | 4774 | 3.6788824 |
| 4709 | 3.6729287 | 4742 | 3.6759615 | 4775 | 3.6789734 |
| 4710 | 3.6730209 | 4743 | 3.6760531 | 4776 | 3.6790643 |
| 4711 | 3.6731131 | 4744 | 3.6761447 | 4777 | 3.6791552 |
| 4712 | 3.6732053 | 4745 | 3.6762362 | 4778 | 3.6792461 |
| 4713 | 3.6732974 | 4746 | 3.6763277 | 4779 | 3.6793370 |
| 4714 | 3.6733896 | 4747 | 3.6764192 | 4780 | 3.6794279 |
| 4715 | 3.6734817 | 4748 | 3.6765107 | 4781 | 3.6795187 |
| 4716 | 3.6735738 | 4749 | 3.6766022 | 4782 | 3.6796096 |
| 4717 | 3.6736659 | 4750 | 3.6766936 | 4783 | 3.6797004 |
| 4718 | 3.6737579 | 4751 | 3.6767850 | 4784 | 3.6797912 |
| 4719 | 3.6738500 | 4752 | 3.6768764 | 4785 | 3.6798819 |
| 4720 | 3.6739420 | 4753 | 3.6769678 | 4786 | 3.6799727 |
| 4721 | 3.6740340 | 4754 | 3.6770592 | 4787 | 3.6800634 |
| 4722 | 3.6741260 | 4755 | 3.6771505 | 4788 | 3.6801541 |
| 4723 | 3.6742179 | 4756 | 3.6772418 | 4789 | 3.6802448 |
| 4724 | 3.6743099 | 4757 | 3.6773332 | 4790 | 3.6803355 |
| 4725 | 3.6744018 | 4758 | 3.6774244 | 4791 | 3.6804262 |
| 4726 | 3.6744937 | 4759 | 3.6775157 | 4792 | 3.6805168 |
| 4727 | 3.6745856 | 4760 | 3.6776069 | 4793 | 3.6806074 |
| 4728 | 3.6746775 | 4761 | 3.6776982 | 4794 | 3.6806980 |
| 4729 | 3.6747693 | 4762 | 3.6777894 | 4795 | 3.680-886 |
| 4730 | 3.6748611 | 4763 | 3.6778806 | 4796 | 3.6808792 |
| 4731 | 3.6749529 | 4764 | 3.6779718 | 4797 | 3.6809697 |
| 4732 | 3.6750447 | 4765 | 3.6780629 | 4798 | 3.6810602 |
| 4733 | 3.6751365 | 4766 | 3.6781540 | 4799 | 3.6811507 |
| 4734 | 3.6752283 | 4767 | 3.6782452 | 4800 | 3.6812412 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 4801 | 3.6813317 | 4834 | 3.6843066 | 4867 | 3.6872613 |
| 4802 | 3.6814222 | 4835 | 3.6843965 | 4868 | 3.6873506 |
| 4803 | 3.6815126 | 4836 | 3.6844863 | 4869 | 3.6874398 |
| 4804 | 3.6816030 | 4837 | 3.6845761 | 4870 | 3.6875290 |
| 4805 | 3.6816934 | 4838 | 3.6846659 | 4871 | 3.6876181 |
| 4806 | 3.6817838 | 4839 | 3.6847556 | 4872 | 3.6877073 |
| 4807 | 3.6818741 | 4840 | 3.6848454 | 4873 | 3.6877964 |
| 4808 | 3.6819645 | 4841 | 3.6849351 | 4874 | 3.6878855 |
| 4809 | 3.6820548 | 4842 | 3.6850248 | 4875 | 3.6879746 |
| 4810 | 3.6821451 | 4843 | 3.6851145 | 4876 | 3.6880637 |
| 4811 | 3.6822354 | 4844 | 3.6852041 | 4877 | 3.6881528 |
| 4812 | 3.6823256 | 4845 | 3.6852938 | 4878 | 3.6882418 |
| 4813 | 3.6824159 | 4846 | 3.6853834 | 4879 | 3.6883308 |
| 4814 | 3.6825061 | 4847 | 3.6854730 | 4880 | 3.6884198 |
| 4815 | 3.6825963 | 4848 | 3.6855626 | 4881 | 3.6885088 |
| 4816 | 3.6826865 | 4849 | 3.6856522 | 4882 | 3.6885978 |
| 4817 | 3.6827766 | 4850 | 3.6857417 | 4883 | 3.6886867 |
| 4818 | 3.6828668 | 4851 | 3.6858313 | 4884 | 3.6887756 |
| 4819 | 3.6829569 | 4852 | 3.6859208 | 4885 | 3.6888646 |
| 4820 | 3.6830470 | 4853 | 3.6860103 | 4886 | 3.6889535 |
| 4821 | 3.6831371 | 4854 | 3.6860998 | 4887 | 3.6890423 |
| 4822 | 3.6832272 | 4855 | 3.6861892 | 4888 | 3.6891312 |
| 4823 | 3.6833173 | 4856 | 3.6862787 | 4889 | 3.6892200 |
| 4824 | 3.6834073 | 4857 | 3.6863681 | 4890 | 3.6893089 |
| 4825 | 3.6834973 | 4858 | 3.6864575 | 4891 | 3.6893977 |
| 4826 | 3.6835873 | 4859 | 3.6865469 | 4892 | 3.6894864 |
| 4827 | 3.6836773 | 4860 | 3.6866363 | 4893 | 3.6895752 |
| 4828 | 3.6837673 | 4861 | 3.6867256 | 4894 | 3.6896640 |
| 4829 | 3.6838572 | 4862 | 3.6868149 | 4895 | 3.6897527 |
| 4830 | 3.6839471 | 4863 | 3.6869043 | 4896 | 3.6898414 |
| 4831 | 3.6840370 | 4864 | 3.6869936 | 4897 | 3.6899301 |
| 4832 | 3.6841269 | 4865 | 3.6870828 | 4898 | 3.6900188 |
| 4833 | 3.6842168 | 4866 | 3.6871721 | 4899 | 3.6901074 |
| 4834 | 3.6843066 | 4867 | 3.6872613 | 4900 | 3.6901961 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 4901 | 3.6902847 | 4934 | 3.6931991 | 4967 | 3.6960942 |
| 4902 | 3.6903733 | 4935 | 3.6932872 | 4968 | 3.6961816 |
| 4903 | 3.6904619 | 4936 | 3.6933752 | 4969 | 3.6962690 |
| 4904 | 3.6905505 | 4937 | 3.6934631 | 4970 | 3.6963564 |
| 4905 | 3.6906390 | 4938 | 3.6935511 | 4971 | 3.6964438 |
| 4906 | 3.6907275 | 4939 | 3.6936390 | 4972 | 3.6965311 |
| 4907 | 3.6908161 | 4940 | 3.6937269 | 4973 | 3.6966185 |
| 4908 | 3.2909046 | 4941 | 3.6938148 | 4974 | 3.6967058 |
| 4909 | 3.6909930 | 4942 | 3.6939027 | 4975 | 3.6967931 |
| 4910 | 3.6910815 | 4943 | 3.6939906 | 4976 | 3.6968804 |
| 4911 | 3.6911699 | 4944 | 3.6940785 | 4977 | 3.6969676 |
| 4912 | 3.6912584 | 4945 | 3.6941663 | 4978 | 3.6970549 |
| 4913 | 3.6913468 | 4946 | 3.6942541 | 4979 | 3.6971421 |
| 4914 | 3.6914352 | 4947 | 3.6943419 | 4980 | 3.6972293 |
| 4915 | 3.6915235 | 4948 | 3.6944297 | 4981 | 3.6973165 |
| 4916 | 3.6916119 | 4949 | 3.6945174 | 4982 | 3.6974037 |
| 4917 | 3.6917002 | 4950 | 3.6946052 | 4983 | 3.6974909 |
| 4918 | 3.6917885 | 4951 | 3.6946929 | 4984 | 3.6975780 |
| 4919 | 3.6918768 | 4952 | 3.6947806 | 4985 | 3.6976652 |
| 4920 | 3.6919651 | 4953 | 3.6948683 | 4986 | 3.6977523 |
| 4921 | 3.6920534 | 4954 | 3.6949560 | 4987 | 3.6978394 |
| 4922 | 3.6921416 | 4955 | 3.6950437 | 4988 | 3.6979264 |
| 4923 | 3.6922298 | 4956 | 3.6951313 | 4989 | 3.6980135 |
| 4924 | 3.6923180 | 4957 | 3.6952189 | 4990 | 3.6981005 |
| 4925 | 3.6924062 | 4958 | 3.6953065 | 4991 | 3.6981876 |
| 4926 | 3.6924944 | 4959 | 3.6953941 | 4992 | 3.6982746 |
| 4927 | 3.6925826 | 4960 | 3.6954817 | 4993 | 3.6983616 |
| 4928 | 3.6926707 | 4961 | 3.6955692 | 4994 | 3.6984485 |
| 4929 | 3.6927588 | 4962 | 3.6956568 | 4995 | 3.6985355 |
| 4930 | 3.6928469 | 4963 | 3.6957443 | 4996 | 3.6986224 |
| 4931 | 3.6929350 | 4964 | 3.6958318 | 4997 | 3.6987093 |
| 4932 | 3.6930231 | 4965 | 3.6959193 | 4998 | 3.6987963 |
| 4933 | 3.6931111 | 4966 | 3.6960067 | 4999 | 3.6988831 |
| 4934 | 3.6931991 | 4967 | 3.6960942 | 5000 | 3.6989700 |

| *N.* | *Logarit.* | *N.* | *Logarit.* | *N.* | *Logarit.* |
|---|---|---|---|---|---|
| 5001 | 3.6990569 | 5034 | 3.7019132 | 5067 | 3.7047509 |
| 5002 | 3.6991437 | 5035 | 3.7019995 | 5068 | 3.7048366 |
| 5003 | 3.6992305 | 5036 | 3.7020857 | 5069 | 3.7049223 |
| 5004 | 3.6993173 | 5037 | 3.7021719 | 5070 | 3.7050080 |
| 5005 | 3.6994041 | 5038 | 3.7022582 | 5071 | 3.7050936 |
| 5006 | 3.6994908 | 5039 | 3.7023444 | 5072 | 3.7051792 |
| 5007 | 3.6995776 | 5040 | 3.7024305 | 5073 | 3.7052649 |
| 5008 | 3.6996643 | 5041 | 3.7025167 | 5074 | 3.7053505 |
| 5009 | 3.6997510 | 5042 | 3.7026028 | 5075 | 3.7054360 |
| 5010 | 3.6998377 | 5043 | 3.7026890 | 5076 | 3.7055216 |
| 5011 | 3.6999244 | 5044 | 3.7027751 | 5077 | 3.7056072 |
| 5012 | 3.7000111 | 5045 | 3.7028612 | 5078 | 3.7056927 |
| 5013 | 3.7000977 | 5046 | 3.7029472 | 5079 | 3.7057782 |
| 5014 | 3.7001843 | 5047 | 3.7030333 | 5080 | 3.7058637 |
| 5015 | 3.7002709 | 5048 | 3.7031193 | 5081 | 3.7059492 |
| 5016 | 3.7003575 | 5049 | 3.7032054 | 5082 | 3.7060347 |
| 5017 | 3.7004441 | 5050 | 3.7032914 | 5083 | 3.7061201 |
| 5018 | 3.7005307 | 5051 | 3.7033774 | 5084 | 3.7062055 |
| 5019 | 3.7006172 | 5052 | 3.7034633 | 5085 | 3.7062910 |
| 5020 | 3.7007037 | 5053 | 3.7035493 | 5086 | 3.7063764 |
| 5021 | 3.7007902 | 5054 | 3.7036352 | 5087 | 3.7064617 |
| 5022 | 3.7008767 | 5055 | 3.7037212 | 5088 | 3.7065471 |
| 5023 | 3.7009632 | 5056 | 3.7038071 | 5089 | 3.7066324 |
| 5024 | 3.7010496 | 5057 | 3.7038929 | 5090 | 3.7067178 |
| 5025 | 3.7011361 | 5058 | 3.7039788 | 5091 | 3.7068031 |
| 5026 | 3.7012225 | 5059 | 3.7040647 | 5092 | 3.7068884 |
| 5027 | 3.7013089 | 5060 | 3.7041505 | 5093 | 3.7069737 |
| 5028 | 3.7013953 | 5061 | 3.7042363 | 5094 | 3.7070589 |
| 5029 | 3.7014816 | 5062 | 3.7043221 | 5095 | 3.7071442 |
| 5030 | 3.7015680 | 5063 | 3.7044079 | 5096 | 3.7072294 |
| 5031 | 3.7016543 | 5064 | 3.7044937 | 5097 | 3.7073146 |
| 5032 | 3.7017406 | 5065 | 3.7045794 | 5098 | 3.7073998 |
| 5033 | 3.7018269 | 5066 | 3.7046652 | 5099 | 3.7074850 |
| 5034 | 3.7019132 | 5067 | 3.7047509 | 5100 | 3.7075702 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5101 | 3.7076553 | 5134 | 3.7104559 | 5167 | 3.7132385 |
| 5102 | 3.7077405 | 5135 | 3.7105404 | 5168 | 3.7133225 |
| 5103 | 3.7078256 | 5136 | 3.7106250 | 5169 | 3.7134065 |
| 5104 | 3.7079107 | 5137 | 3.7107096 | 5170 | 3.7134905 |
| 5105 | 3.7079957 | 5138 | 3.7107941 | 5171 | 3.7135745 |
| 5106 | 3.7080808 | 5139 | 3.7108786 | 5172 | 3.7136585 |
| 5107 | 3.7081659 | 5140 | 3.7109631 | 5173 | 3.7137425 |
| 5108 | 3.7082509 | 5141 | 3.7110476 | 5174 | 3.7138264 |
| 5109 | 3.7083359 | 5142 | 3.7111321 | 5175 | 3.7139104 |
| 5110 | 3.7084209 | 5143 | 3.7112165 | 5176 | 3.7139943 |
| 5111 | 3.7085059 | 5144 | 3.7113010 | 5177 | 3.7140782 |
| 5112 | 3.7085908 | 5145 | 3.7113854 | 5178 | 3.7141620 |
| 5113 | 3.7086758 | 5146 | 3.7114698 | 5179 | 3.7142459 |
| 5114 | 3.7087607 | 5147 | 3.7115542 | 5180 | 3.7143298 |
| 5115 | 3.7088456 | 5148 | 3.7116385 | 5181 | 3.7144136 |
| 5116 | 3.7089305 | 5149 | 3.7117229 | 5182 | 3.7144974 |
| 5117 | 3.7090154 | 5150 | 3.7118072 | 5183 | 3.7145812 |
| 5118 | 3.7091003 | 5151 | 3.7118915 | 5184 | 3.7146650 |
| 5119 | 3.7091851 | 5152 | 3.7119759 | 5185 | 3.7147488 |
| 5120 | 3.7092700 | 5153 | 3.7120601 | 5186 | 3.7148325 |
| 5121 | 3.7093548 | 5154 | 3.7121444 | 5187 | 3.7149162 |
| 5122 | 3.7094396 | 5155 | 3.7122287 | 5188 | 3.7150000 |
| 5123 | 3.7095244 | 5156 | 3.7123129 | 5189 | 3.7150837 |
| 5124 | 3.7096091 | 5157 | 3.7123971 | 5190 | 3.7151674 |
| 5125 | 3.7096939 | 5158 | 3.7124813 | 5191 | 3.7152510 |
| 5126 | 3.7097786 | 5159 | 3.7125655 | 5192 | 3.7153347 |
| 5127 | 3.7098633 | 5160 | 3.7126497 | 5193 | 3.7154183 |
| 5128 | 3.7099480 | 5161 | 3.7127339 | 5194 | 3.7155019 |
| 5129 | 3.7100327 | 5162 | 3.7128180 | 5195 | 3.7155856 |
| 5130 | 3.7101174 | 5163 | 3.7129021 | 5196 | 3.7156691 |
| 5131 | 3.7102020 | 5164 | 3.7129862 | 5197 | 3.7157527 |
| 5132 | 3.7102866 | 5165 | 3.7130703 | 5198 | 3.7158363 |
| 5133 | 3.7103713 | 5166 | 3.7131544 | 5199 | 3.7159198 |
| 5134 | 3.7104559 | 5167 | 3.7132385 | 5200 | 3.7160033 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5201 | 3.7160869 | 5234 | 3.7188337 | 5267 | 3.7215633 |
| 5202 | 3.7161703 | 5235 | 3.7189167 | 5268 | 3.7216458 |
| 5203 | 3.7162538 | 5236 | 3.7189996 | 5269 | 3.7217282 |
| 5204 | 3.7163373 | 5237 | 3.7190826 | 5270 | 3.7218106 |
| 5205 | 3.7164207 | 5238 | 3.7191655 | 5271 | 3.7218930 |
| 5206 | 3.7165042 | 5239 | 3.7192484 | 5272 | 3.7219754 |
| 5207 | 3.7165876 | 5240 | 3.7193313 | 5273 | 3.7220578 |
| 5208 | 3.7166710 | 5241 | 3.7194142 | 5274 | 3.7221401 |
| 5209 | 3.7167544 | 5242 | 3.7194970 | 5275 | 3.7222225 |
| 5210 | 3.7168377 | 5243 | 3.7195799 | 5276 | 3.7223048 |
| 5211 | 3.7169211 | 5244 | 3.7196627 | 5277 | 3.7223871 |
| 5212 | 3.7170044 | 5245 | 3.7197455 | 5278 | 3.7224694 |
| 5213 | 3.7170877 | 5246 | 3.7198283 | 5279 | 3.7225517 |
| 5214 | 3.7171710 | 5247 | 3.7199111 | 5280 | 3.7226339 |
| 5215 | 3.7172543 | 5248 | 3.7199938 | 5281 | 3.7227162 |
| 5216 | 3.7173376 | 5249 | 3.7200766 | 5282 | 3.7227984 |
| 5217 | 3.7174208 | 5250 | 3.7201593 | 5283 | 3.7228806 |
| 5218 | 3.7175041 | 5251 | 3.7202420 | 5284 | 3.7229628 |
| 5219 | 3.7175873 | 5252 | 3.7203247 | 5285 | 3.7230450 |
| 5220 | 3.7176705 | 5253 | 3.7204074 | 5286 | 3.7231272 |
| 5221 | 3.7177537 | 5254 | 3.7204901 | 5287 | 3.7232093 |
| 5222 | 3.7178369 | 5255 | 3.7205727 | 5288 | 3.7232914 |
| 5223 | 3.7179200 | 5256 | 3.7206554 | 5289 | 3.7233736 |
| 5224 | 3.7180032 | 5257 | 3.7207380 | 5290 | 3.7234557 |
| 5225 | 3.7180863 | 5258 | 3.7208206 | 5291 | 3.7235378 |
| 5226 | 3.7181694 | 5259 | 3.7209032 | 5292 | 3.7236198 |
| 5227 | 3.7182525 | 5260 | 3.7209857 | 5293 | 3.7237019 |
| 5228 | 3.7183356 | 5261 | 3.7210683 | 5294 | 3.7237839 |
| 5229 | 3.7184186 | 5262 | 3.7211508 | 5295 | 3.7238660 |
| 5230 | 3.7185017 | 5263 | 3.7212334 | 5296 | 3.7239480 |
| 5231 | 3.7185847 | 5264 | 3.7213159 | 5297 | 3.7240300 |
| 5232 | 3.7186677 | 5265 | 3.7213984 | 5298 | 3.7241120 |
| 5233 | 3.7187507 | 5266 | 3.7214809 | 5299 | 3.7241939 |
| 5234 | 3.7188337 | 5267 | 3.7215633 | 5300 | 3.7242759 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5301 | 3.7243578 | 5334 | 3.7270530 | 5367 | 3.7297316 |
| 5302 | 3.7244397 | 5335 | 3.7271344 | 5368 | 3.7298125 |
| 5303 | 3.7245216 | 5336 | 3.7272158 | 5369 | 3.7298934 |
| 5304 | 3.7246035 | 5337 | 3.7272972 | 5370 | 3.7299743 |
| 5305 | 3.7246854 | 5338 | 3.7273786 | 5371 | 3.7300551 |
| 5306 | 3.7247672 | 5339 | 3.7274599 | 5372 | 3.7301360 |
| 5307 | 3.7248491 | 5340 | 3.7275413 | 5373 | 3.7302168 |
| 5308 | 3.7249309 | 5341 | 3.7276226 | 5374 | 3.7302977 |
| 5309 | 3.7250127 | 5342 | 3.7277039 | 5375 | 3.7303785 |
| 5310 | 3.7250945 | 5343 | 3.7277852 | 5376 | 3.7304593 |
| 5311 | 3.7251763 | 5344 | 3.7278664 | 5377 | 3.7305400 |
| 5312 | 3.7252581 | 5345 | 3.7279477 | 5378 | 3.7306208 |
| 5313 | 3.7253398 | 5346 | 3.7280290 | 5379 | 3.7307015 |
| 5314 | 3.7254215 | 5347 | 3.7281102 | 5380 | 3.7307823 |
| 5315 | 3.7255033 | 5348 | 3.7281914 | 5381 | 3.7308630 |
| 5316 | 3.7255850 | 5349 | 3.7282726 | 5382 | 3.7309437 |
| 5317 | 3.7256667 | 5350 | 3.7283538 | 5383 | 3.7310244 |
| 5318 | 3.7257483 | 5351 | 3.7284349 | 5384 | 3.7311051 |
| 5319 | 3.7258300 | 5352 | 3.7285161 | 5385 | 3.7311857 |
| 5320 | 3.7259116 | 5353 | 3.7285972 | 5386 | 3.7312663 |
| 5321 | 3.7259933 | 5354 | 3.7286784 | 5387 | 3.7313470 |
| 5322 | 3.7260749 | 5355 | 3.7287595 | 5388 | 3.7314276 |
| 5323 | 3.7261565 | 5356 | 3.7288406 | 5389 | 3.7315082 |
| 5324 | 3.7262380 | 5357 | 3.7289216 | 5390 | 3.7315888 |
| 5325 | 3.7263196 | 5358 | 3.7290027 | 5391 | 3.7316693 |
| 5326 | 3.7264012 | 5359 | 3.7290838 | 5392 | 3.7317499 |
| 5327 | 3.7264827 | 5360 | 3.7291648 | 5393 | 3.7318304 |
| 5328 | 3.7265642 | 5361 | 3.7292458 | 5394 | 3.7319109 |
| 5329 | 3.7266457 | 5362 | 3.7293268 | 5395 | 3.7319914 |
| 5330 | 3.7267272 | 5363 | 3.7294078 | 5396 | 3.7320719 |
| 5331 | 3.7268087 | 5364 | 3.7294888 | 5397 | 3.7321524 |
| 5332 | 3.7268901 | 5365 | 3.7295697 | 5398 | 3.7322329 |
| 5333 | 3.7269716 | 5366 | 3.7296507 | 5399 | 3.7323133 |
| 5334 | 3.7270530 | 5367 | 3.7297316 | 5400 | 3.7323938 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5401 | 3.7324742 | 5434 | 3.7351196 | 5467 | 3.7377491 |
| 5402 | 3.7325546 | 5435 | 3.7351995 | 5468 | 3.7378285 |
| 5403 | 3.7326350 | 5436 | 3.7352794 | 5469 | 3.7379079 |
| 5404 | 3.7327153 | 5437 | 3.7353593 | 5470 | 3.7379873 |
| 5405 | 3.7327957 | 5438 | 3.7354392 | 5471 | 3.7380667 |
| 5406 | 3.7328760 | 5439 | 3.7355191 | 5472 | 3.7381461 |
| 5407 | 3.7329564 | 5440 | 3.7355989 | 5473 | 3.7382254 |
| 5408 | 3.7330367 | 5441 | 3.7356787 | 5474 | 3.7383048 |
| 5409 | 3.7331170 | 5442 | 3.7357585 | 5475 | 3.7383841 |
| 5410 | 3.7331973 | 5443 | 3.7358383 | 5476 | 3.7384634 |
| 5411 | 3.7332775 | 5444 | 3.7359181 | 5477 | 3.7385427 |
| 5412 | 3.7333578 | 5445 | 3.7359979 | 5478 | 3.7386220 |
| 5413 | 3.7334380 | 5446 | 3.7360776 | 5479 | 3.7387013 |
| 5414 | 3.7335182 | 5447 | 3.7361574 | 5480 | 3.7387806 |
| 5415 | 3.7335985 | 5448 | 3.7362371 | 5481 | 3.7388598 |
| 5416 | 3.7336787 | 5449 | 3.7363168 | 5482 | 3.7389390 |
| 5417 | 3.7337588 | 5450 | 3.7363965 | 5483 | 3.7390182 |
| 5418 | 3.7338390 | 5451 | 3.7364762 | 5484 | 3.7390974 |
| 5419 | 3.7339191 | 5452 | 3.7365558 | 5485 | 3.7391766 |
| 5420 | 3.7339993 | 5453 | 3.7366355 | 5486 | 3.7392558 |
| 5421 | 3.7340794 | 5454 | 3.7367151 | 5487 | 3.7393350 |
| 5422 | 3.7341595 | 5455 | 3.7367948 | 5488 | 3.7394141 |
| 5423 | 3.7342396 | 5456 | 3.7368744 | 5489 | 3.7394932 |
| 5424 | 3.7343197 | 5457 | 3.7369540 | 5490 | 3.7395723 |
| 5425 | 3.7343997 | 5458 | 3.7370335 | 5491 | 3.7396514 |
| 5426 | 3.7344798 | 5459 | 3.7371131 | 5492 | 3.7397305 |
| 5427 | 3.7345598 | 5460 | 3.7371926 | 5493 | 3.7398096 |
| 5428 | 3.7346398 | 5461 | 3.7372722 | 5494 | 3.7398886 |
| 5429 | 3.7347198 | 5462 | 3.7373517 | 5495 | 3.7399677 |
| 5430 | 3.7347998 | 5463 | 3.7374312 | 5496 | 3.7400467 |
| 5431 | 3.7348798 | 5464 | 3.7375107 | 5497 | 3.7401257 |
| 5432 | 3.7349598 | 5465 | 3.7375902 | 5498 | 3.7402047 |
| 5433 | 3.7350397 | 5466 | 3.7376696 | 5499 | 3.7402837 |
| 5434 | 3.7351196 | 5467 | 3.7377491 | 5500 | 3.7403627 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5501 | 3.7404416 | 5534 | 3.7430392 | 5567 | 3.7456212 |
| 5502 | 3.7405206 | 5535 | 3.7431176 | 5568 | 3.7456992 |
| 5503 | 3.7405995 | 5536 | 3.7431961 | 5569 | 3.7457772 |
| 5504 | 3.7406784 | 5537 | 3.7432745 | 5570 | 3.7458552 |
| 5505 | 3.7407573 | 5538 | 3.7433530 | 5571 | 3.7459332 |
| 5506 | 3.7408362 | 5539 | 3.7434314 | 5572 | 3.7460111 |
| 5507 | 3.7409151 | 5540 | 3.7435098 | 5573 | 3.7460890 |
| 5508 | 3.7409939 | 5541 | 3.7435881 | 5574 | 3.7461670 |
| 5509 | 3.7410728 | 5542 | 3.7436665 | 5575 | 3.7462449 |
| 5510 | 3.7411516 | 5543 | 3.7437449 | 5576 | 3.7463228 |
| 5511 | 3.7412304 | 5544 | 3.7438232 | 5577 | 3.7464006 |
| 5512 | 3.7413092 | 5545 | 3.7439015 | 5578 | 3.7464785 |
| 5513 | 3.7413880 | 5546 | 3.7439799 | 5579 | 3.7465564 |
| 5514 | 3.7414668 | 5547 | 3.7440582 | 5580 | 3.7466342 |
| 5515 | 3.7415455 | 5548 | 3.7441365 | 5581 | 3.7467120 |
| 5516 | 3.7416243 | 5549 | 3.7442147 | 5582 | 3.7467898 |
| 5517 | 3.7417030 | 5550 | 3.7442930 | 5583 | 3.7468676 |
| 5518 | 3.7417817 | 5551 | 3.7443712 | 5584 | 3.7469454 |
| 5519 | 3.7418604 | 5552 | 3.7444495 | 5585 | 3.7470232 |
| 5520 | 3.7419391 | 5553 | 3.7445277 | 5586 | 3.7471009 |
| 5521 | 3.7420177 | 5554 | 3.7446059 | 5587 | 3.7471787 |
| 5522 | 3.7420964 | 5555 | 3.7446841 | 5588 | 3.7472564 |
| 5523 | 3.7421750 | 5556 | 3.7447622 | 5589 | 3.7473341 |
| 5524 | 3.7422537 | 5557 | 3.7448404 | 5590 | 3.7474118 |
| 5525 | 3.7423323 | 5558 | 3.7449185 | 5591 | 3.7474895 |
| 5526 | 3.7424109 | 5559 | 3.7449967 | 5592 | 3.7475672 |
| 5527 | 3.7424895 | 5560 | 3.7450748 | 5593 | 3.7476448 |
| 5528 | 3.7425680 | 5561 | 3.7451529 | 5594 | 3.7477225 |
| 5529 | 3.7426466 | 5562 | 3.7452310 | 5595 | 3.7478001 |
| 5530 | 3.7427251 | 5563 | 3.7453091 | 5596 | 3.7478777 |
| 5531 | 3.7428037 | 5564 | 3.7453871 | 5597 | 3.7479553 |
| 5532 | 3.7428822 | 5565 | 3.7454652 | 5598 | 3.7480329 |
| 5533 | 3.7429607 | 5566 | 3.7455432 | 5599 | 3.7481105 |
| 5534 | 3.7430392 | 5567 | 3.7456212 | 5600 | 3.7481880 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5601 | 3.7482656 | 5634 | 3.7508168 | 5667 | 3.7533532 |
| 5602 | 3.7483431 | 5635 | 3.7508939 | 5668 | 3.7534298 |
| 5603 | 3.7484206 | 5636 | 3.7509710 | 5669 | 3.7535065 |
| 5604 | 3.7484981 | 5637 | 3.7510480 | 5670 | 3.7535831 |
| 5605 | 3.7485756 | 5638 | 3.7511251 | 5671 | 3.7536596 |
| 5606 | 3.7486531 | 5639 | 3.7512021 | 5672 | 3.7537362 |
| 5607 | 3.7487306 | 5640 | 3.7512791 | 5673 | 3.7538128 |
| 5608 | 3.7488080 | 5641 | 3.7513561 | 5674 | 3.7538893 |
| 5609 | 3.7488854 | 5642 | 3.7514331 | 5675 | 3.7539659 |
| 5610 | 3.7489629 | 5643 | 3.7515100 | 5676 | 3.7540424 |
| 5611 | 3.7490403 | 5644 | 3.7515870 | 5677 | 3.7541189 |
| 5612 | 3.7491177 | 5645 | 3.7516639 | 5678 | 3.7541954 |
| 5613 | 3.7491950 | 5646 | 3.7517409 | 5679 | 3.7542719 |
| 5614 | 3.7492724 | 5647 | 3.7518178 | 5680 | 3.7543483 |
| 5615 | 3.7493498 | 5648 | 3.7518947 | 5681 | 3.7544248 |
| 5616 | 3.7494271 | 5649 | 3.7519716 | 5682 | 3.7545012 |
| 5617 | 3.7495044 | 5650 | 3.7520484 | 5683 | 3.7545777 |
| 5618 | 3.7495817 | 5651 | 3.7521253 | 5684 | 3.7546541 |
| 5619 | 3.7496590 | 5652 | 3.7522022 | 5685 | 3.7547305 |
| 5620 | 3.7497363 | 5653 | 3.7522790 | 5686 | 3.7548069 |
| 5621 | 3.7498136 | 5654 | 3.7523558 | 5687 | 3.7548832 |
| 5622 | 3.7498908 | 5655 | 3.7524326 | 5688 | 3.7549596 |
| 5623 | 3.7499681 | 5656 | 3.7525094 | 5689 | 3.7550359 |
| 5624 | 3.7500453 | 5657 | 3.7525862 | 5690 | 3.7551123 |
| 5625 | 3.7501225 | 5658 | 3.7526629 | 5691 | 3.7551886 |
| 5626 | 3.7501997 | 5659 | 3.7527397 | 5692 | 3.7552649 |
| 5627 | 3.7502769 | 5660 | 3.7528164 | 5693 | 3.7553412 |
| 5628 | 3.7503541 | 5661 | 3.7528932 | 5694 | 3.7554175 |
| 5629 | 3.7504312 | 5662 | 3.7529699 | 5695 | 3.7554937 |
| 5630 | 3.7505084 | 5663 | 3.7530466 | 5696 | 3.7555700 |
| 5631 | 3.7505855 | 5664 | 3.7531232 | 5697 | 3.7556462 |
| 5632 | 3.7506626 | 5665 | 3.7531999 | 5698 | 3.7557224 |
| 5633 | 3.7507398 | 5666 | 3.7532766 | 5699 | 3.7557987 |
| 5634 | 3.7508168 | 5667 | 3.7533532 | 5700 | 3.7558749 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5701 | 3.7559510 | 5734 | 3.7584577 | 5767 | 3.7609500 |
| 5702 | 3.7560272 | 5735 | 3.7585334 | 5768 | 3.7610253 |
| 5703 | 3.7561034 | 5736 | 3.7586091 | 5769 | 3.7611005 |
| 5704 | 3.7561795 | 5737 | 3.7586848 | 5770 | 3.7611758 |
| 5705 | 3.7562556 | 5738 | 3.7587605 | 5771 | 3.7612511 |
| 5706 | 3.7563318 | 5739 | 3.7588362 | 5772 | 3.7613263 |
| 5707 | 3.7564079 | 5740 | 3.7589119 | 5773 | 3.7614016 |
| 5708 | 3.7564840 | 5741 | 3.7589875 | 5774 | 3.7614768 |
| 5709 | 3.7565600 | 5742 | 3.7590632 | 5775 | 3.7615520 |
| 5710 | 3.7566361 | 5743 | 3.7591388 | 5776 | 3.7616272 |
| 5711 | 3.7567122 | 5744 | 3.7592144 | 5777 | 3.7617024 |
| 5712 | 3.7567882 | 5745 | 3.7592900 | 5778 | 3.7617775 |
| 5713 | 3.7568642 | 5746 | 3.7593656 | 5779 | 3.7618527 |
| 5714 | 3.7569402 | 5747 | 3.7594412 | 5780 | 3.7619278 |
| 5715 | 3.7570162 | 5748 | 3.7595168 | 5781 | 3.7620030 |
| 5716 | 3.7570922 | 5749 | 3.7595923 | 5782 | 3.7620781 |
| 5717 | 3.7571682 | 5750 | 3.7596678 | 5783 | 3.7621532 |
| 5718 | 3.7572441 | 5751 | 3.7597434 | 5784 | 3.7622283 |
| 5719 | 3.7573201 | 5752 | 3.7598189 | 5785 | 3.7623034 |
| 5720 | 3.7573960 | 5753 | 3.7598944 | 5786 | 3.7623784 |
| 5721 | 3.7574719 | 5754 | 3.7599699 | 5787 | 3.7624535 |
| 5722 | 3.7575479 | 5755 | 3.7600453 | 5788 | 3.7625285 |
| 5723 | 3.7576237 | 5756 | 3.7601208 | 5789 | 3.7626035 |
| 5724 | 3.7576996 | 5757 | 3.7601962 | 5790 | 3.7626786 |
| 5725 | 3.7577755 | 5758 | 3.7602717 | 5791 | 3.7627536 |
| 5726 | 3.7578513 | 5759 | 3.7603471 | 5792 | 3.7628286 |
| 5727 | 3.7579272 | 5760 | 3.7604225 | 5793 | 3.7629035 |
| 5728 | 3.7580030 | 5761 | 3.7604979 | 5794 | 3.7629785 |
| 5729 | 3.7580788 | 5762 | 3.7605733 | 5795 | 3.7630534 |
| 5730 | 3.7581546 | 5763 | 3.7606486 | 5796 | 3.7631284 |
| 5731 | 3.7582304 | 5764 | 3.7607240 | 5797 | 3.7632033 |
| 5732 | 3.7583062 | 5765 | 3.7607993 | 5798 | 3.7632782 |
| 5733 | 3.7583819 | 5766 | 3.7608746 | 5799 | 3.7633531 |
| 5734 | 3.7584577 | 5767 | 3.7609500 | 5800 | 3.7634280 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5801 | 3.7635029 | 5834 | 3.7659664 | 5867 | 3.7684161 |
| 5802 | 3.7635777 | 5835 | 3.7660409 | 5868 | 3.7684901 |
| 5803 | 3.7636526 | 5836 | 3.7661153 | 5869 | 3.7685641 |
| 5804 | 3.7637274 | 5837 | 3.7661897 | 5870 | 3.7686381 |
| 5805 | 3.7638022 | 5838 | 3.7662641 | 5871 | 3.7687121 |
| 5806 | 3.7638770 | 5839 | 3.7663385 | 5872 | 3.7687860 |
| 5807 | 3.7639518 | 5840 | 3.7664128 | 5873 | 3.7688600 |
| 5808 | 3.7640266 | 5841 | 3.7664872 | 5874 | 3.7689339 |
| 5809 | 3.7641014 | 5842 | 3.7665616 | 5875 | 3.7690079 |
| 5810 | 3.7641761 | 5843 | 3.7666359 | 5876 | 3.7690818 |
| 5811 | 3.7642509 | 5844 | 3.7667102 | 5877 | 3.7691557 |
| 5812 | 3.7643256 | 5845 | 3.7667845 | 5878 | 3.7692296 |
| 5813 | 3.7644003 | 5846 | 3.7668588 | 5879 | 3.7693035 |
| 5814 | 3.7644750 | 5847 | 3.7669331 | 5880 | 3.7693773 |
| 5815 | 3.7645497 | 5848 | 3.7670074 | 5881 | 3.7694512 |
| 5816 | 3.7646244 | 5849 | 3.7670816 | 5882 | 3.7695250 |
| 5817 | 3.7646991 | 5850 | 3.7671559 | 5883 | 3.7695988 |
| 5818 | 3.7647737 | 5851 | 3.7672301 | 5884 | 3.7696727 |
| 5819 | 3.7648484 | 5852 | 3.7673043 | 5885 | 3.7697465 |
| 5820 | 3.7649230 | 5853 | 3.7673785 | 5886 | 3.7698203 |
| 5821 | 3.7649976 | 5854 | 3.7674527 | 5887 | 3.7698940 |
| 5822 | 3.7650722 | 5855 | 3.7675269 | 5888 | 3.7699678 |
| 5823 | 3.7651468 | 5856 | 3.7676011 | 5889 | 3.7700416 |
| 5824 | 3.7652214 | 5857 | 3.7676752 | 5890 | 3.7701153 |
| 5825 | 3.7652959 | 5858 | 3.7677494 | 5891 | 3.7701890 |
| 5826 | 3.7653705 | 5859 | 3.7678235 | 5892 | 3.7702627 |
| 5827 | 3.7654450 | 5860 | 3.7678976 | 5893 | 3.7703364 |
| 5828 | 3.7655195 | 5861 | 3.7679717 | 5894 | 3.7704101 |
| 5829 | 3.7655941 | 5862 | 3.7680458 | 5895 | 3.7704838 |
| 5830 | 3.7656686 | 5863 | 3.7681199 | 5896 | 3.7705575 |
| 5831 | 3.7657430 | 5864 | 3.7681940 | 5897 | 3.7706311 |
| 5832 | 3.7658175 | 5865 | 3.7682680 | 5898 | 3.7707048 |
| 5833 | 3.7658920 | 5866 | 3.7683421 | 5899 | 3.7707784 |
| 5834 | 3.7659664 | 5867 | 3.7684161 | 5900 | 3.7708520 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 5901 | 3.7709256 | 5934 | 3.7733475 | 5967 | 3.7757560 |
| 5902 | 3.7709992 | 5935 | 3.7734207 | 5968 | 3.7758288 |
| 5903 | 3.7710728 | 5936 | 3.7734939 | 5969 | 3.7759016 |
| 5904 | 3.7711463 | 5937 | 3.7735670 | 5970 | 3.7759743 |
| 5905 | 3.7712199 | 5938 | 3.7736402 | 5971 | 3.7760471 |
| 5906 | 3.7712934 | 5939 | 3.7737133 | 5972 | 3.7761198 |
| 5907 | 3.7713670 | 5940 | 3.7737864 | 5973 | 3.7761925 |
| 5908 | 3.7714405 | 5941 | 3.7738596 | 5974 | 3.7762652 |
| 5909 | 3.7715140 | 5942 | 3.7739326 | 5975 | 3.7763379 |
| 5910 | 3.7715875 | 5943 | 3.7740057 | 5976 | 3.7764106 |
| 5911 | 3.7716610 | 5944 | 3.7740788 | 5977 | 3.7764833 |
| 5912 | 3.7717344 | 5945 | 3.7741519 | 5978 | 3.7765559 |
| 5913 | 3.7718079 | 5946 | 3.7742249 | 5979 | 3.7766286 |
| 5914 | 3.7718813 | 5947 | 3.7742979 | 5980 | 3.7767012 |
| 5915 | 3.7719547 | 5948 | 3.7743710 | 5981 | 3.7767738 |
| 5916 | 3.7720282 | 5949 | 3.7744440 | 5982 | 3.7768464 |
| 5917 | 3.7721016 | 5950 | 3.7745170 | 5983 | 3.7769190 |
| 5918 | 3.7721750 | 5951 | 3.7745899 | 5984 | 3.7769916 |
| 5919 | 3.7722483 | 5952 | 3.7746629 | 5985 | 3.7770642 |
| 5920 | 3.7723217 | 5953 | 3.7747359 | 5986 | 3.7771367 |
| 5921 | 3.7723951 | 5954 | 3.7748088 | 5987 | 3.7772093 |
| 5922 | 3.7724684 | 5955 | 3.7748818 | 5988 | 3.7772818 |
| 5923 | 3.7725417 | 5956 | 3.7749547 | 5989 | 3.7773543 |
| 5924 | 3.7726150 | 5957 | 3.7750276 | 5990 | 3.7774268 |
| 5925 | 3.7726884 | 5958 | 3.7751005 | 5991 | 3.7774993 |
| 5926 | 3.7727616 | 5959 | 3.7751734 | 5992 | 3.7775718 |
| 5927 | 3.7728349 | 5960 | 3.7752463 | 5993 | 3.7776443 |
| 5928 | 3.7729082 | 5961 | 3.7753191 | 5994 | 3.7777167 |
| 5929 | 3.7729814 | 5962 | 3.7753920 | 5995 | 3.7777892 |
| 5930 | 3.7730547 | 5963 | 3.7754648 | 5996 | 3.7778616 |
| 5931 | 3.7731279 | 5964 | 3.7755376 | 5997 | 3.7779340 |
| 5932 | 3.7732011 | 5965 | 3.7756104 | 5998 | 3.7780065 |
| 5933 | 3.7732743 | 5966 | 3.7756832 | 5999 | 3.7780789 |
| 5934 | 3.7733475 | 5967 | 3.7757560 | 6000 | 3.7781512 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6001 | 3.7782236 | 6034 | 3.7806053 | 6067 | 3.7829740 |
| 6002 | 3.7782960 | 6035 | 3.7806773 | 6068 | 3.7830456 |
| 6003 | 3.7783683 | 6036 | 3.7807492 | 6069 | 3.7831171 |
| 6004 | 3.7784407 | 6037 | 3.7808212 | 6070 | 3.7831887 |
| 6005 | 3.7785130 | 6038 | 3.7808931 | 6071 | 3.7832602 |
| 6006 | 3.7785853 | 6039 | 3.7809650 | 6072 | 3.7833318 |
| 6007 | 3.7786576 | 6040 | 3.7810369 | 6073 | 3.7834033 |
| 6008 | 3.7787299 | 6041 | 3.7811088 | 6074 | 3.7834748 |
| 6009 | 3.7788022 | 6042 | 3.7811807 | 6075 | 3.7835463 |
| 6010 | 3.7788745 | 6043 | 3.7812526 | 6076 | 3.7836178 |
| 6011 | 3.7789467 | 6044 | 3.7813245 | 6077 | 3.7836892 |
| 6012 | 3.7790190 | 6045 | 3.7813963 | 6078 | 3.7837607 |
| 6013 | 3.7790912 | 6046 | 3.7814681 | 6079 | 3.7838321 |
| 6014 | 3.7791634 | 6047 | 3.7815400 | 6080 | 3.7839036 |
| 6015 | 3.7792356 | 6048 | 3.7816118 | 6081 | 3.7839750 |
| 6016 | 3.7793078 | 6049 | 3.7816836 | 6082 | 3.7840464 |
| 6017 | 3.7793800 | 6050 | 3.7817554 | 6083 | 3.7841178 |
| 6018 | 3.7794522 | 6051 | 3.7818272 | 6084 | 3.7841892 |
| 6019 | 3.7795243 | 6052 | 3.7818989 | 6085 | 3.7842606 |
| 6020 | 3.7795965 | 6053 | 3.7819707 | 6086 | 3.7843319 |
| 6021 | 3.7796686 | 6054 | 3.7820424 | 6087 | 3.7844033 |
| 6022 | 3.7797408 | 6055 | 3.7821141 | 6088 | 3.7844746 |
| 6023 | 3.7798129 | 6056 | 3.7821859 | 6089 | 3.7845460 |
| 6024 | 3.7798850 | 6057 | 3.7822576 | 6090 | 3.7846173 |
| 6025 | 3.7799571 | 6058 | 3.7823293 | 6091 | 3.7846886 |
| 6026 | 3.7800291 | 6059 | 3.7824010 | 6092 | 3.7847599 |
| 6027 | 3.7801012 | 6060 | 3.7824726 | 6093 | 3.7848312 |
| 6028 | 3.7801732 | 6061 | 3.7825443 | 6094 | 3.7849024 |
| 6029 | 3.7802453 | 6062 | 3.7826159 | 6095 | 3.7849737 |
| 6030 | 3.7803173 | 6063 | 3.7826876 | 6096 | 3.7850450 |
| 6031 | 3.7803893 | 6064 | 3.7827592 | 6097 | 3.7851162 |
| 6032 | 3.7804613 | 6065 | 3.7828308 | 6098 | 3.7851874 |
| 6033 | 3.7805333 | 6066 | 3.7829024 | 6099 | 3.7852586 |
| 6034 | 3.7806053 | 6067 | 3.7829740 | 6100 | 3.7853298 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6101 | 3.7854010 | 6134 | 3.7877438 | 6167 | 3.7900739 |
| 6102 | 3.7854722 | 6135 | 3.7878146 | 6168 | 3.7901444 |
| 6103 | 3.7855434 | 6136 | 3.7878853 | 6169 | 3.7902148 |
| 6104 | 3.7856145 | 6137 | 3.7879561 | 6170 | 3.7902852 |
| 6105 | 3.7856857 | 6138 | 3.7880269 | 6171 | 3.7903555 |
| 6106 | 3.7857568 | 6139 | 3.7880976 | 6172 | 3.7904259 |
| 6107 | 3.7858279 | 6140 | 3.7881684 | 6173 | 3.7904963 |
| 6108 | 3.7858990 | 6141 | 3.7882391 | 6174 | 3.7905666 |
| 6109 | 3.7859701 | 6142 | 3.7883098 | 6175 | 3.7906370 |
| 6110 | 3.7860412 | 6143 | 3.7883805 | 6176 | 3.7907073 |
| 6111 | 3.7861123 | 6144 | 3.7884512 | 6177 | 3.7907776 |
| 6112 | 3.7861833 | 6145 | 3.7885219 | 6178 | 3.7908479 |
| 6113 | 3.7862544 | 6146 | 3.7885926 | 6179 | 3.7909182 |
| 6114 | 3.7863254 | 6147 | 3.7886632 | 6180 | 3.7909885 |
| 6115 | 3.7863965 | 6148 | 3.7887339 | 6181 | 3.7910587 |
| 6116 | 3.7864675 | 6149 | 3.7888045 | 6182 | 3.7911290 |
| 6117 | 3.7865385 | 6150 | 3.7888751 | 6183 | 3.7911992 |
| 6118 | 3.7866095 | 6151 | 3.7889457 | 6184 | 3.7912695 |
| 6119 | 3.7866805 | 6152 | 3.7890163 | 6185 | 3.7913397 |
| 6120 | 3.7867514 | 6153 | 3.7890869 | 6186 | 3.7914099 |
| 6121 | 3.7868224 | 6154 | 3.7891575 | 6187 | 3.7914801 |
| 6122 | 3.7868933 | 6155 | 3.7892281 | 6188 | 3.7915503 |
| 6123 | 3.7869643 | 6156 | 3.7892986 | 6189 | 3.7916205 |
| 6124 | 3.7870352 | 6157 | 3.7893691 | 6190 | 3.7916906 |
| 6125 | 3.7871061 | 6158 | 3.7894397 | 6191 | 3.7917608 |
| 6126 | 3.7871770 | 6159 | 3.7895102 | 6192 | 3.7918309 |
| 6127 | 3.7872479 | 6160 | 3.7895807 | 6193 | 3.7919011 |
| 6128 | 3.7873188 | 6161 | 3.7896512 | 6194 | 3.7919712 |
| 6129 | 3.7873896 | 6162 | 3.7897217 | 6195 | 3.7920413 |
| 6130 | 3.7874605 | 6163 | 3.7897922 | 6196 | 3.7921114 |
| 6131 | 3.7875313 | 6164 | 3.78986[illegible]6 | 6197 | 3.7921815 |
| 6132 | 3.7876021 | 6165 | 3.7899331 | 6198 | 3.7922516 |
| 6133 | 3.7876730 | 6166 | 3.7900035 | 6199 | 3.7923216 |
| 6134 | 3.7877438 | 6167 | 3.7900739 | 6200 | 3.7923917 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6201 | 3.7924617 | 6234 | 3.7947668 | 6267 | 3.7970597 |
| 6202 | 3.7925318 | 6235 | 3.7948365 | 6268 | 3.7971290 |
| 6203 | 3.7926018 | 6236 | 3.7949061 | 6269 | 3.7971983 |
| 6204 | 3.7926718 | 6237 | 3.7949757 | 6270 | 3.7972675 |
| 6205 | 3.7927418 | 6238 | 3.7950454 | 6271 | 3.7973368 |
| 6206 | 3.7928118 | 6239 | 3.7951150 | 6272 | 3.7974060 |
| 6207 | 3.7928817 | 6240 | 3.7951846 | 6273 | 3.7974753 |
| 6208 | 3.7929517 | 6241 | 3.7952542 | 6274 | 3.7975445 |
| 6209 | 3.7930217 | 6242 | 3.7953238 | 6275 | 3.7976137 |
| 6210 | 3.7930916 | 6243 | 3.7953933 | 6276 | 3.7976829 |
| 6211 | 3.7931615 | 6244 | 3.7954629 | 6277 | 3.7977521 |
| 6212 | 3.7932314 | 6245 | 3.7955324 | 6278 | 3.7978213 |
| 6213 | 3.7933014 | 6246 | 3.7956020 | 6279 | 3.7978905 |
| 6214 | 3.7933712 | 6247 | 3.7956715 | 6280 | 3.7979596 |
| 6215 | 3.7934411 | 6248 | 3.7957410 | 6281 | 3.7980288 |
| 6216 | 3.7935110 | 6249 | 3.7958105 | 6282 | 3.7980979 |
| 6217 | 3.7935809 | 6250 | 3.7958800 | 6283 | 3.7981671 |
| 6218 | 3.7936507 | 6251 | 3.7959495 | 6284 | 3.7982362 |
| 6219 | 3.7937206 | 6252 | 3.7960190 | 6285 | 3.7983053 |
| 6220 | 3.7937904 | 6253 | 3.7960884 | 6286 | 3.7983744 |
| 6221 | 3.7938602 | 6254 | 3.7961579 | 6287 | 3.7984435 |
| 6222 | 3.7939300 | 6255 | 3.7962273 | 6288 | 3.7985125 |
| 6223 | 3.7939998 | 6256 | 3.7962967 | 6289 | 3.7985816 |
| 6224 | 3.7940696 | 6257 | 3.7963662 | 6290 | 3.7986506 |
| 6225 | 3.7941394 | 6258 | 3.7964356 | 6291 | 3.7987197 |
| 6226 | 3.7942091 | 6259 | 3.7965050 | 6292 | 3.7987887 |
| 6227 | 3.7942789 | 6260 | 3.7965743 | 6293 | 3.7988577 |
| 6228 | 3.7943486 | 6261 | 3.7966437 | 6294 | 3.7989267 |
| 6229 | 3.7944183 | 6262 | 3.7967131 | 6295 | 3.7989957 |
| 6230 | 3.7944880 | 6263 | 3.7967824 | 6296 | 3.7990647 |
| 6231 | 3.7945578 | 6264 | 3.7968517 | 6297 | 3.7991337 |
| 6232 | 3.7946274 | 6265 | 3.7969211 | 6298 | 3.7992027 |
| 6233 | 3.7946971 | 6266 | 3.7969904 | 6299 | 3.7992716 |
| 6234 | 3.7947668 | 6267 | 3.7970597 | 6300 | 3.7993405 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6301 | 3.7994095 | 6334 | 3.8016781 | 6367 | 3.8039348 |
| 6302 | 3.7994784 | 6335 | 3.8017466 | 6368 | 3.8040031 |
| 6303 | 3.7995473 | 6336 | 3.8018152 | 6369 | 3.8040712 |
| 6304 | 3.7996162 | 6337 | 3.8018837 | 6370 | 3.8041394 |
| 6305 | 3.7996851 | 6338 | 3.8019522 | 6371 | 3.8042076 |
| 6306 | 3.7997540 | 6339 | 3.8020208 | 6372 | 3.8042758 |
| 6307 | 3.7998228 | 6340 | 3.8020893 | 6373 | 3.8043439 |
| 6308 | 3.7998917 | 6341 | 3.8021578 | 6374 | 3.8044121 |
| 6309 | 3.7999605 | 6342 | 3.8022262 | 6375 | 3.8044802 |
| 6310 | 3.8000294 | 6343 | 3.8022947 | 6376 | 3.8045483 |
| 6311 | 3.8000982 | 6344 | 3.8023632 | 6377 | 3.8046164 |
| 6312 | 3.8001670 | 6345 | 3.8024316 | 6378 | 3.8046845 |
| 6313 | 3.8002358 | 6346 | 3.8025001 | 6379 | 3.8047526 |
| 6314 | 3.8003046 | 6347 | 3.8025685 | 6380 | 3.8048207 |
| 6315 | 3.8003734 | 6348 | 3.8026369 | 6381 | 3.8048887 |
| 6316 | 3.8004421 | 6349 | 3.8027053 | 6382 | 3.8049568 |
| 6317 | 3.8005109 | 6350 | 3.8027737 | 6383 | 3.8050248 |
| 6318 | 3.8005796 | 6351 | 3.8028421 | 6384 | 3.8050929 |
| 6319 | 3.8006484 | 6352 | 3.8029105 | 6385 | 3.8051609 |
| 6320 | 3.8007171 | 6353 | 3.8029789 | 6386 | 3.8052289 |
| 6321 | 3.8007858 | 6354 | 3.8030472 | 6387 | 3.8052969 |
| 6322 | 3.8008545 | 6355 | 3.8031156 | 6388 | 3.8053649 |
| 6323 | 3.8009232 | 6356 | 3.8031839 | 6389 | 3.8054329 |
| 6324 | 3.8009919 | 6357 | 3.8032522 | 6390 | 3.8055009 |
| 6325 | 3.8010605 | 6358 | 3.8033205 | 6391 | 3.8055688 |
| 6326 | 3.8011292 | 6359 | 3.8033888 | 6392 | 3.8056368 |
| 6327 | 3.8011978 | 6360 | 3.8034571 | 6393 | 3.8057047 |
| 6328 | 3.8012665 | 6361 | 3.8035254 | 6394 | 3.8057726 |
| 6329 | 3.8013351 | 6362 | 3.8035937 | 6395 | 3.8058405 |
| 6330 | 3.8014037 | 6363 | 3.8036619 | 6396 | 3.8059085 |
| 6331 | 3.8014723 | 6364 | 3.8037302 | 6397 | 3.8059763 |
| 6332 | 3.8015409 | 6365 | 3.8037984 | 6398 | 3.8060442 |
| 6333 | 3.8016095 | 6366 | 3.8038666 | 6399 | 3.8061121 |
| 6334 | 3.8016781 | 6367 | 3.8039348 | 6400 | 3.8061800 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6401 | 3.8062478 | 6434 | 3.8084811 | 6467 | 3.8107029 |
| 6402 | 3.8063157 | 6435 | 3.8085485 | 6468 | 3.8107700 |
| 6403 | 3.8063835 | 6436 | 3.8086160 | 6469 | 3.8108371 |
| 6404 | 3.8064513 | 6437 | 3.8086835 | 6470 | 3.8109043 |
| 6405 | 3.8065191 | 6438 | 3.8087510 | 6471 | 3.8109714 |
| 6406 | 3.8065869 | 6439 | 3.8088184 | 6472 | 3.8110385 |
| 6407 | 3.8066547 | 6440 | 3.8088859 | 6473 | 3.8111056 |
| 6408 | 3.8067225 | 6441 | 3.8089533 | 6474 | 3.8111727 |
| 6409 | 3.8067903 | 6442 | 3.8090207 | 6475 | 3.8112398 |
| 6410 | 3.8068580 | 6443 | 3.8090881 | 6476 | 3.8113068 |
| 6411 | 3.8069258 | 6444 | 3.8091555 | 6477 | 3.8113739 |
| 6412 | 3.8069935 | 6445 | 3.8092229 | 6478 | 3.8114409 |
| 6413 | 3.8070612 | 6446 | 3.8092903 | 6479 | 3.8115080 |
| 6414 | 3.8071290 | 6447 | 3.8093577 | 6480 | 3.8115750 |
| 6415 | 3.8071967 | 6448 | 3.8094250 | 6481 | 3.8116420 |
| 6416 | 3.8072644 | 6449 | 3.8094924 | 6482 | 3.8117090 |
| 6417 | 3.8073320 | 6450 | 3.8095597 | 6483 | 3.8117760 |
| 6418 | 3.8073997 | 6451 | 3.8096270 | 6484 | 3.8118430 |
| 6419 | 3.8074674 | 6452 | 3.8096944 | 6485 | 3.8119100 |
| 6420 | 3.8075350 | 6453 | 3.8097617 | 6486 | 3.8119769 |
| 6421 | 3.8076027 | 6454 | 3.8098290 | 6487 | 3.8120439 |
| 6422 | 3.8076703 | 6455 | 3.8098962 | 6488 | 3.8121108 |
| 6423 | 3.8077379 | 6456 | 3.8099635 | 6489 | 3.8121778 |
| 6424 | 3.8078055 | 6457 | 3.8100308 | 6490 | 3.8122447 |
| 6425 | 3.8078731 | 6458 | 3.8100980 | 6491 | 3.8123116 |
| 6426 | 3.8079407 | 6459 | 3.8101653 | 6492 | 3.8123785 |
| 6427 | 3.8080083 | 6460 | 3.8102325 | 6493 | 3.8124454 |
| 6428 | 3.8080759 | 6461 | 3.8102997 | 6494 | 3.8125123 |
| 6429 | 3.8081434 | 6462 | 3.8103670 | 6495 | 3.8125792 |
| 6430 | 3.8082110 | 6463 | 3.8104342 | 6496 | 3.8126460 |
| 6431 | 3.8082785 | 6464 | 3.8105013 | 6497 | 3.8127129 |
| 6432 | 3.8083460 | 6465 | 3.8105685 | 6498 | 3.8127797 |
| 6433 | 3.8084136 | 6466 | 3.8106357 | 6499 | 3.8128465 |
| 6434 | 3.8084811 | 6467 | 3.8107029 | 6500 | 3.8129134 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6501 | 3.8129802 | 6534 | 3.8151791 | 6567 | 3.8173670 |
| 6502 | 3.8130470 | 6535 | 3.8152456 | 6568 | 3.8174331 |
| 6503 | 3.8131138 | 6536 | 3.8153120 | 6569 | 3.8174993 |
| 6504 | 3.8131805 | 6537 | 3.8153785 | 6570 | 3.8175654 |
| 6505 | 3.8132473 | 6538 | 3.8154449 | 6571 | 3.8176315 |
| 6506 | 3.8133141 | 6539 | 3.8155113 | 6572 | 3.8176976 |
| 6507 | 3.8133808 | 6540 | 3.8155777 | 6573 | 3.8177636 |
| 6508 | 3.8134475 | 6541 | 3.8156441 | 6574 | 3.8178297 |
| 6509 | 3.8135143 | 6542 | 3.8157105 | 6575 | 3.8178958 |
| 6510 | 3.8135810 | 6543 | 3.8157769 | 6576 | 3.8179618 |
| 6511 | 3.8136477 | 6544 | 3.8158433 | 6577 | 3.8180278 |
| 6512 | 3.8137144 | 6545 | 3.8159096 | 6578 | 3.8180939 |
| 6513 | 3.8137811 | 6546 | 3.8159760 | 6579 | 3.8181599 |
| 6514 | 3.8138478 | 6547 | 3.8160423 | 6580 | 3.8182259 |
| 6515 | 3.8139144 | 6548 | 3.8161087 | 6581 | 3.8182919 |
| 6516 | 3.8139811 | 6549 | 3.8161750 | 6582 | 3.8183579 |
| 6517 | 3.8140477 | 6550 | 3.8162413 | 6583 | 3.8184239 |
| 6518 | 3.8141144 | 6551 | 3.8163076 | 6584 | 3.8184898 |
| 6519 | 3.8141810 | 6552 | 3.8163739 | 6585 | 3.8185558 |
| 6520 | 3.8142476 | 6553 | 3.8164402 | 6586 | 3.8186217 |
| 6521 | 3.8143142 | 6554 | 3.8165064 | 6587 | 3.8186877 |
| 6522 | 3.8143808 | 6555 | 3.8165727 | 6588 | 3.8187536 |
| 6523 | 3.8144474 | 6556 | 3.8166389 | 6589 | 3.8188195 |
| 6524 | 3.8145140 | 6557 | 3.8167052 | 6590 | 3.8188854 |
| 6525 | 3.8145805 | 6558 | 3.8167714 | 6591 | 3.8189513 |
| 6526 | 3.8146471 | 6559 | 3.8168376 | 6592 | 3.8190172 |
| 6527 | 3.8147136 | 6560 | 3.8169038 | 6593 | 3.8190831 |
| 6528 | 3.8147801 | 6561 | 3.8169700 | 6594 | 3.8191489 |
| 6529 | 3.8148467 | 6562 | 3.8170362 | 6595 | 3.8192148 |
| 6530 | 3.8149132 | 6563 | 3.8171024 | 6596 | 3.8192806 |
| 6531 | 3.8149797 | 6564 | 3.8171686 | 6597 | 3.8193465 |
| 6532 | 3.8150462 | 6565 | 3.8172347 | 6598 | 3.8194123 |
| 6533 | 3.8151127 | 6566 | 3.8173009 | 6599 | 3.8194781 |
| 6534 | 3.8151791 | 6567 | 3.8173670 | 6600 | 3.8195439 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6601 | 3.8196097 | 6634 | 3.8217755 | 6667 | 3.8239305 |
| 6602 | 3.8196755 | 6635 | 3.8218409 | 6668 | 3.8239956 |
| 6603 | 3.8197413 | 6636 | 3.8219064 | 6669 | 3.8240607 |
| 6604 | 3.8198071 | 6637 | 3.8219718 | 6670 | 3.8241258 |
| 6605 | 3.8198728 | 6638 | 3.8220372 | 6671 | 3.8241909 |
| 6606 | 3.8199386 | 6639 | 3.8221027 | 6672 | 3.8232560 |
| 6607 | 3.8200043 | 6640 | 3.8221681 | 6673 | 3.8243211 |
| 6608 | 3.8200700 | 6641 | 3.8222335 | 6674 | 3.8243862 |
| 6609 | 3.8201358 | 6642 | 3.8222989 | 6675 | 3.8244513 |
| 6610 | 3.8202015 | 6643 | 3.8223643 | 6676 | 3.8245163 |
| 6611 | 3.8202672 | 6644 | 3.8224296 | 6677 | 3.8245814 |
| 6612 | 3.8203328 | 6645 | 3.8224950 | 6678 | 3.8246464 |
| 6613 | 3.8203985 | 6646 | 3.8225603 | 6679 | 3.8247114 |
| 6614 | 3.8204642 | 6647 | 3.8226257 | 6680 | 3.8247765 |
| 6615 | 3.8205298 | 6648 | 3.8226910 | 6681 | 3.8248415 |
| 6616 | 3.8205955 | 6649 | 3.8227563 | 6682 | 3.8249065 |
| 6617 | 3.8206611 | 6650 | 3.8228216 | 6683 | 3.8249715 |
| 6618 | 3.8207268 | 6651 | 3.8228869 | 6684 | 3.8250364 |
| 6619 | 3.8207924 | 6652 | 3.8229522 | 6685 | 3.8251014 |
| 6620 | 3.8208580 | 6653 | 3.8230175 | 6686 | 3.8251664 |
| 6621 | 3.8209236 | 6654 | 3.8230828 | 6687 | 3.8252313 |
| 6622 | 3.8209892 | 6655 | 3.8231481 | 6688 | 3.8252963 |
| 6623 | 3.8210548 | 6656 | 3.8232133 | 6689 | 3.8253612 |
| 6624 | 3.8211203 | 6657 | 3.8232786 | 6690 | 3.8254261 |
| 6625 | 3.8211859 | 6658 | 3.8233438 | 6691 | 3.8254910 |
| 6626 | 3.8212514 | 6659 | 3.8234090 | 6692 | 3.8255559 |
| 6627 | 3.8213170 | 6660 | 3.8234742 | 6693 | 3.8256208 |
| 6628 | 3.8213825 | 6661 | 3.8235394 | 6694 | 3.8256857 |
| 6629 | 3.8214480 | 6662 | 3.8236046 | 6695 | 3.8257506 |
| 6630 | 3.8215135 | 6663 | 3.8236698 | 6696 | 3.8258154 |
| 6631 | 3.8215790 | 6664 | 3.8237350 | 6697 | 3.8258803 |
| 6632 | 3.8216445 | 6665 | 3.8238002 | 6698 | 3.8259451 |
| 6633 | 3.8217100 | 6666 | 3.8238653 | 6699 | 3.8260100 |
| 6634 | 3.8217755 | 6667 | 3.8239305 | 6700 | 3.8260748 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6701 | 3.8261396 | 6734 | 3.8282731 | 6767 | 3.8303962 |
| 6702 | 3.8262044 | 6735 | 3.8283376 | 6768 | 3.8304603 |
| 6703 | 3.8262692 | 6736 | 3.8284021 | 6769 | 3.8305245 |
| 6704 | 3.8263340 | 6737 | 3.8284665 | 6770 | 3.8305887 |
| 6705 | 3.8263988 | 6738 | 3.8285310 | 6771 | 3.8306528 |
| 6706 | 3.8264635 | 6739 | 3.8285955 | 6772 | 3.8307169 |
| 6707 | 3.8265283 | 6740 | 3.8286599 | 6773 | 3.8307811 |
| 6708 | 3.8265931 | 6741 | 3.8287243 | 6774 | 3.8308452 |
| 6709 | 3.8266578 | 6742 | 3.8287887 | 6775 | 3.8309093 |
| 6710 | 3.8267225 | 6743 | 3.8288532 | 6776 | 3.8309734 |
| 6711 | 3.8267872 | 6744 | 3.8289176 | 6777 | 3.8310375 |
| 6712 | 3.8268519 | 6745 | 3.8289820 | 6778 | 3.8311016 |
| 6713 | 3.8269166 | 6746 | 3.8290463 | 6779 | 3.8311656 |
| 6714 | 3.8269813 | 6747 | 3.8291107 | 6780 | 3.8312297 |
| 6715 | 3.8270460 | 6748 | 3.8291751 | 6781 | 3.8312937 |
| 6716 | 3.8271107 | 6749 | 3.8292394 | 6782 | 3.8313578 |
| 6717 | 3.8271753 | 6750 | 3.8293038 | 6783 | 3.8314218 |
| 6718 | 3.8272400 | 6751 | 3.8293681 | 6784 | 3.8314858 |
| 6719 | 3.8273046 | 6752 | 3.8294324 | 6785 | 3.8315499 |
| 6720 | 3.8273693 | 6753 | 3.8294967 | 6786 | 3.8316139 |
| 6721 | 3.8274339 | 6754 | 3.8295611 | 6787 | 3.8316778 |
| 6722 | 3.8274985 | 6755 | 3.8296254 | 6788 | 3.8317418 |
| 6723 | 3.8275631 | 6756 | 3.8296896 | 6789 | 3.8318058 |
| 6724 | 3.8276277 | 6757 | 3.8297539 | 6790 | 3.8318698 |
| 6725 | 3.8276923 | 6758 | 3.8298182 | 6791 | 3.8319337 |
| 6726 | 3.8277569 | 6759 | 3.8298824 | 6792 | 3.8319977 |
| 6727 | 3.8278214 | 6760 | 3.8299467 | 6793 | 3.8320616 |
| 6728 | 3.8278860 | 6761 | 3.8300109 | 6794 | 3.8321255 |
| 6729 | 3.8279505 | 6762 | 3.8300752 | 6795 | 3.8321895 |
| 6730 | 3.8280151 | 6763 | 3.8301394 | 6796 | 3.8322534 |
| 6731 | 3.8280796 | 6764 | 3.8302036 | 6797 | 3.8323173 |
| 6732 | 3.8281441 | 6765 | 3.8302678 | 6798 | 3.8323812 |
| 6733 | 3.8282086 | 6766 | 3.8303320 | 6799 | 3.8324450 |
| 6734 | 3.8282731 | 6767 | 3.8303962 | 6800 | 3.8325089 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6801 | 3.8325728 | 6834 | 3.8346750 | 6867 | 3.8367670 |
| 6802 | 3.8326366 | 6835 | 3.8347385 | 6868 | 3.8368303 |
| 6803 | 3.8327005 | 6836 | 3.8348021 | 6869 | 3.8368935 |
| 6804 | 3.8327643 | 6837 | 3.8348656 | 6870 | 3.8369567 |
| 6805 | 3.8328281 | 6838 | 3.8349291 | 6871 | 3.8370199 |
| 6806 | 3.8328919 | 6839 | 3.8349926 | 6872 | 3.8370832 |
| 6807 | 3.8329558 | 6840 | 3.8350561 | 6873 | 3.8371463 |
| 6808 | 3.8330195 | 6841 | 3.8351196 | 6874 | 3.8372095 |
| 6809 | 3.8330833 | 6842 | 3.8351831 | 6875 | 3.8372727 |
| 6810 | 3.8331471 | 6843 | 3.8352465 | 6876 | 3.8373359 |
| 6811 | 3.8332109 | 6844 | 3.8353100 | 6877 | 3.8373990 |
| 6812 | 3.8332746 | 6845 | 3.8353735 | 6878 | 3.8374622 |
| 6813 | 3.8333384 | 6846 | 3.8354369 | 6879 | 3.8375253 |
| 6814 | 3.8334021 | 6847 | 3.8355003 | 6880 | 3.8375884 |
| 6815 | 3.8334659 | 6848 | 3.8355638 | 6881 | 3.8376516 |
| 6816 | 3.8335296 | 6849 | 3.8356272 | 6882 | 3.8377147 |
| 6817 | 3.8335933 | 6850 | 3.8356906 | 6883 | 3.8377778 |
| 6818 | 3.8336570 | 6851 | 3.8357540 | 6884 | 3.8378409 |
| 6819 | 3.8337207 | 6852 | 3.8358174 | 6885 | 3.8379039 |
| 6820 | 3.8337844 | 6853 | 3.8358807 | 6886 | 3.8379670 |
| 6821 | 3.8338480 | 6854 | 3.8359441 | 6887 | 3.8380301 |
| 6822 | 3.8339117 | 6855 | 3.8360075 | 6888 | 3.8380931 |
| 6823 | 3.8339754 | 6856 | 3.8360708 | 6889 | 3.8381562 |
| 6824 | 3.8340390 | 6857 | 3.8361341 | 6890 | 3.8382192 |
| 6825 | 3.8341027 | 6858 | 3.8361975 | 6891 | 3.8382822 |
| 6826 | 3.8341663 | 6859 | 3.8362608 | 6892 | 3.8383453 |
| 6827 | 3.8342299 | 6860 | 3.8363241 | 6893 | 3.8384083 |
| 6828 | 3.8342935 | 6861 | 3.8363874 | 6894 | 3.8384713 |
| 6829 | 3.8343571 | 6862 | 3.8364507 | 6895 | 3.8385343 |
| 6830 | 3.8344207 | 6863 | 3.8365140 | 6896 | 3.8385973 |
| 6831 | 3.8344843 | 6864 | 3.8365773 | 6897 | 3.8386602 |
| 6832 | 3.8345479 | 6865 | 3.8366405 | 6898 | 3.8387232 |
| 6833 | 3.8346114 | 6866 | 3.8367038 | 6899 | 3.8387861 |
| 6834 | 3.8346750 | 6867 | 3.8367670 | 6900 | 3.8388491 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 6901 | 3.8389120 | 6934 | 3.8409838 | 6967 | 3.8430458 |
| 6902 | 3.8389750 | 6935 | 3.8410465 | 6968 | 3.8431081 |
| 6903 | 3.8390379 | 6936 | 3.8411091 | 6969 | 3.8431705 |
| 6904 | 3.8391008 | 6937 | 3.8411717 | 6970 | 3.8432328 |
| 6905 | 3.8391637 | 6938 | 3.8412343 | 6971 | 3.8432951 |
| 6906 | 3.8392266 | 6939 | 3.8412969 | 6972 | 3.8433574 |
| 6907 | 3.8392895 | 6940 | 3.8413595 | 6973 | 3.8434197 |
| 6908 | 3.8393523 | 6941 | 3.8414220 | 6974 | 3.8434819 |
| 6909 | 3.8394152 | 6942 | 3.8414846 | 6975 | 3.8435442 |
| 6910 | 3.8394780 | 6943 | 3.8415472 | 6976 | 3.8436065 |
| 6911 | 3.8395409 | 6944 | 3.8416097 | 6977 | 3.8436687 |
| 6912 | 3.8396037 | 6945 | 3.8416722 | 6978 | 3.8437310 |
| 6913 | 3.8396666 | 6946 | 3.8417348 | 6979 | 3.8437932 |
| 6914 | 3.8397294 | 6947 | 3.8417973 | 6980 | 3.8438554 |
| 6915 | 3.8397922 | 6948 | 3.8418598 | 6981 | 3.8439176 |
| 6916 | 3.8398550 | 6949 | 3.8419223 | 6982 | 3.8439798 |
| 6917 | 3.8399178 | 6950 | 3.8419848 | 6983 | 3.8440420 |
| 6918 | 3.8399806 | 6951 | 3.8420473 | 6984 | 3.8441042 |
| 6919 | 3.8400433 | 6952 | 3.8421098 | 6985 | 3.8441664 |
| 6920 | 3.8401061 | 6953 | 3.8421722 | 6986 | 3.8442285 |
| 6921 | 3.8401688 | 6954 | 3.8422347 | 6987 | 3.8442907 |
| 6922 | 3.8402316 | 6955 | 3.8422971 | 6988 | 3.8443529 |
| 6923 | 3.8402943 | 6956 | 3.8423596 | 6989 | 3.8444150 |
| 6924 | 3.8403571 | 6957 | 3.8424220 | 6990 | 3.8444772 |
| 6925 | 3.8404198 | 6958 | 3.8424844 | 6991 | 3.8445393 |
| 6926 | 3.8404825 | 6959 | 3.8425468 | 6992 | 3.8446014 |
| 6927 | 3.8405452 | 6960 | 3.8426092 | 6993 | 3.8446635 |
| 6928 | 3.8406079 | 6961 | 3.8426716 | 6994 | 3.8447256 |
| 6929 | 3.8406706 | 6962 | 3.8427340 | 6995 | 3.8447877 |
| 6930 | 3.8407332 | 6963 | 3.8427964 | 6996 | 3.8448498 |
| 6931 | 3.8407959 | 6964 | 3.8428588 | 6997 | 3.8449119 |
| 6932 | 3.8408586 | 6965 | 3.8429211 | 6998 | 3.8449739 |
| 6933 | 3.8409212 | 6966 | 3.8429835 | 6999 | 3.8450360 |
| 6934 | 3.8409838 | 6967 | 3.8430458 | 7000 | 3.8450980 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 7001 | 3.8451601 | 7034 | 3.8472024 | 7067 | 3.8492351 |
| 7002 | 3.8452221 | 7035 | 3.8472641 | 7068 | 3.8492965 |
| 7003 | 3.8452841 | 7036 | 3.8473258 | 7069 | 3.8493580 |
| 7004 | 3.8453461 | 7037 | 3.8473876 | 7070 | 3.8494194 |
| 7005 | 3.8454081 | 7038 | 3.8474493 | 7071 | 3.8494808 |
| 7006 | 3.8454701 | 7039 | 3.8475110 | 7072 | 3.8495423 |
| 7007 | 3.8455321 | 7040 | 3.8475727 | 7073 | 3.8496037 |
| 7008 | 3.8455941 | 7041 | 3.8476343 | 7074 | 3.8496651 |
| 7009 | 3.8456561 | 7042 | 3.8476960 | 7075 | 3.8497264 |
| 7010 | 3.8457180 | 7043 | 3.8477577 | 7076 | 3.8497878 |
| 7011 | 3.8457800 | 7044 | 3.8478193 | 7077 | 3.8498492 |
| 7012 | 3.8458419 | 7045 | 3.8478810 | 7078 | 3.8499106 |
| 7013 | 3.8459038 | 7046 | 3.8479426 | 7079 | 3.8499719 |
| 7014 | 3.8459658 | 7047 | 3.8480043 | 7080 | 3.8500333 |
| 7015 | 3.8460277 | 7048 | 3.8480659 | 7081 | 3.8500946 |
| 7016 | 3.8460896 | 7049 | 3.8481275 | 7082 | 3.9501559 |
| 7017 | 3.8461515 | 7050 | 3.8481891 | 7083 | 3.8502172 |
| 7018 | 3.8462134 | 7051 | 3.8482507 | 7084 | 3.8502786 |
| 7019 | 3.8462752 | 7052 | 3.8483123 | 7085 | 3.8503399 |
| 7020 | 3.8463371 | 7053 | 3.8483739 | 7086 | 3.8504011 |
| 7021 | 3.8463990 | 7054 | 3.8484355 | 7087 | 3.8504624 |
| 7022 | 3.8464608 | 7055 | 3.8484970 | 7088 | 3.8505237 |
| 7023 | 3.8465227 | 7056 | 3.8485586 | 7089 | 3.8505850 |
| 7024 | 3.8465845 | 7057 | 3.8486201 | 7090 | 3.8506462 |
| 7025 | 3.8466463 | 7058 | 3.8486817 | 7091 | 3.8507075 |
| 7026 | 3.8467081 | 7059 | 3.8487432 | 7092 | 3.8507687 |
| 7027 | 3.8467700 | 7060 | 3.8488047 | 7093 | 3.8508300 |
| 7028 | 3.8468318 | 7061 | 3.8488662 | 7094 | 3.8508912 |
| 7029 | 3.8468935 | 7062 | 3.8489277 | 7095 | 3.8509524 |
| 7030 | 3.8469553 | 7063 | 3.8489892 | 7096 | 3.8510136 |
| 7031 | 3.8470171 | 7064 | 3.8490507 | 7097 | 3.8510748 |
| 7032 | 3.8470789 | 7065 | 3.8491122 | 7098 | 3.8511360 |
| 7033 | 3.8471406 | 7066 | 3.8491736 | 7099 | 3.8511972 |
| 7034 | 3.8472024 | 7067 | 3.8492351 | 7100 | 3.8512583 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 7101 | 3.8513195 | 7134 | 3.8533331 | 7167 | 3.8553374 |
| 7102 | 3.8513807 | 7135 | 3.8533940 | 7168 | 3.8553980 |
| 7103 | 3.8514418 | 7136 | 3.8534548 | 7169 | 3.8554586 |
| 7104 | 3.8515030 | 7137 | 3.8535157 | 7170 | 3.8555192 |
| 7105 | 3.8515641 | 7138 | 3.8535765 | 7171 | 3.8555797 |
| 7106 | 3.8516252 | 7139 | 3.8536374 | 7172 | 3.8556403 |
| 7107 | 3.8516863 | 7140 | 3.8536982 | 7173 | 3.8557008 |
| 7108 | 3.8517474 | 7141 | 3.8537590 | 7174 | 3.8557614 |
| 7109 | 3.8518085 | 7142 | 3.8538198 | 7175 | 3.8558219 |
| 7110 | 3.8518696 | 7143 | 3.8538806 | 7176 | 3.8558824 |
| 7111 | 3.8519307 | 7144 | 3.8539414 | 7177 | 3.8559429 |
| 7112 | 3.8519917 | 7145 | 3.8540022 | 7178 | 3.8560035 |
| 7113 | 3.8520528 | 7146 | 3.8540630 | 7179 | 3.8560640 |
| 7114 | 3.8521139 | 7147 | 3.8541238 | 7180 | 3.8561244 |
| 7115 | 3.8521749 | 7148 | 3.8541845 | 7181 | 3.8561849 |
| 7116 | 3.8522359 | 7149 | 3.8542453 | 7182 | 3.8562454 |
| 7117 | 3.8522970 | 7150 | 3.8543060 | 7183 | 3.8563059 |
| 7118 | 3.8523580 | 7151 | 3.8543668 | 7184 | 3.8563663 |
| 7119 | 3.8524190 | 7152 | 3.8544275 | 7185 | 3.8564268 |
| 7120 | 3.8524800 | 7153 | 3.8544882 | 7186 | 3.8564872 |
| 7121 | 3.8525410 | 7154 | 3.8545489 | 7187 | 3.8565476 |
| 7122 | 3.8526020 | 7155 | 3.8546096 | 7188 | 3.8566081 |
| 7123 | 3.8526629 | 7156 | 3.8546703 | 7189 | 3.8566685 |
| 7124 | 3.8527239 | 7157 | 3.8547310 | 7190 | 3.8567289 |
| 7125 | 3.8527849 | 7158 | 3.8547917 | 7191 | 3.8567893 |
| 7126 | 3.8528458 | 7159 | 3.8548524 | 7192 | 3.8568497 |
| 7127 | 3.8529068 | 7160 | 3.8549130 | 7193 | 3.8569101 |
| 7128 | 3.8529677 | 7161 | 3.8549737 | 7194 | 3.8569704 |
| 7129 | 3.8530286 | 7162 | 3.8550343 | 7195 | 3.8570308 |
| 7130 | 3.8530895 | 7163 | 3.8550949 | 7196 | 3.8570912 |
| 7131 | 3.8531504 | 7164 | 3.8551556 | 7197 | 3.8571515 |
| 7132 | 3.8532113 | 7165 | 3.8552162 | 7198 | 3.8572118 |
| 7133 | 3.8532722 | 7166 | 3.8552768 | 7199 | 3.8572722 |
| 7134 | 3.8533331 | 7167 | 3.8553374 | 7200 | 3.8573325 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 7201 | 3.8573928 | 7234 | 3.8593785 | 7267 | 3.8613552 |
| 7202 | 3.8574531 | 7235 | 3.8594385 | 7268 | 3.8614149 |
| 7203 | 3.8575134 | 7236 | 3.8594986 | 7269 | 3.8614747 |
| 7204 | 3.8575737 | 7237 | 3.8595586 | 7270 | 3.8615344 |
| 7205 | 3.8576340 | 7238 | 3.8596186 | 7271 | 3.8615941 |
| 7206 | 3.8576943 | 7239 | 3.8596786 | 7272 | 3.8616539 |
| 7207 | 3.8577545 | 7240 | 3.8597386 | 7273 | 3.8617136 |
| 7208 | 3.8578148 | 7241 | 3.8597985 | 7274 | 3.8617733 |
| 7209 | 3.8578750 | 7242 | 3.8598585 | 7275 | 3.8618330 |
| 7210 | 3.8579353 | 7243 | 3.8599185 | 7276 | 3.8618927 |
| 7211 | 3.8579955 | 7244 | 3.8599784 | 7277 | 3.8619524 |
| 7212 | 3.8580557 | 7245 | 3.8600384 | 7278 | 3.8620120 |
| 7213 | 3.8581159 | 7246 | 3.8600983 | 7279 | 3.8620717 |
| 7214 | 3.8581761 | 7247 | 3.8601583 | 7280 | 3.8621314 |
| 7215 | 3.8582363 | 7248 | 3.8602182 | 7281 | 3.8621910 |
| 7216 | 3.8582965 | 7249 | 3.8602781 | 7282 | 3.8622507 |
| 7217 | 3.8583567 | 7250 | 3.8603380 | 7283 | 3.8623103 |
| 7218 | 3.8584169 | 7251 | 3.8603979 | 7284 | 3.8623699 |
| 7219 | 3.8584770 | 7252 | 3.8604578 | 7285 | 3.8624296 |
| 7220 | 3.8585372 | 7253 | 3.8605177 | 7286 | 3.8624892 |
| 7221 | 3.8585973 | 7254 | 3.8605776 | 7287 | 3.8625488 |
| 7222 | 3.8586575 | 7255 | 3.8606374 | 7288 | 3.8626084 |
| 7223 | 3.8587176 | 7256 | 3.8606973 | 7289 | 3.8626679 |
| 7224 | 3.8587777 | 7257 | 3.8607571 | 7290 | 3.8627275 |
| 7225 | 3.8588378 | 7258 | 3.8608170 | 7291 | 3.8627871 |
| 7226 | 3.8588980 | 7259 | 3.8608768 | 7292 | 3.8628467 |
| 7227 | 3.8589581 | 7260 | 3.8609366 | 7293 | 3.8629062 |
| 7228 | 3.8590181 | 7261 | 3.8609964 | 7294 | 3.8629658 |
| 7229 | 3.8590782 | 7262 | 3.8610562 | 7295 | 3.8630253 |
| 7230 | 3.8591383 | 7263 | 3.8611160 | 7296 | 3.8630848 |
| 7231 | 3.8591984 | 7264 | 3.8611758 | 7297 | 3.8631443 |
| 7232 | 3.8592584 | 7265 | 3.8612356 | 7298 | 3.8632039 |
| 7233 | 3.8593185 | 7266 | 3.8612954 | 7299 | 3.8632634 |
| 7234 | 3.8593785 | 7267 | 3.8613552 | 7300 | 3.8633229 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 7301 | 3.8633823 | 7334 | 3.8653409 | 7367 | 3.8672907 |
| 7302 | 3.8634418 | 7335 | 3.8654001 | 7368 | 3.8673496 |
| 7303 | 3.8635013 | 7336 | 3.8654593 | 7369 | 3.8674086 |
| 7304 | 3.8635608 | 7337 | 3.8655185 | 7370 | 3.8674675 |
| 7305 | 3.8636202 | 7338 | 3.8655777 | 7371 | 3.8675264 |
| 7306 | 3.8636797 | 7339 | 3.8656369 | 7372 | 3.8675853 |
| 7307 | 3.8637391 | 7340 | 3.8656961 | 7373 | 3.8676442 |
| 7308 | 3.8637985 | 7341 | 3.8657552 | 7374 | 3.8677031 |
| 7309 | 3.8638580 | 7342 | 3.8658144 | 7375 | 3.8677620 |
| 7310 | 3.8639174 | 7343 | 3.8658735 | 7376 | 3.8678209 |
| 7311 | 3.8639768 | 7344 | 3.8659327 | 7377 | 3.8678798 |
| 7312 | 3.8640362 | 7345 | 3.8659918 | 7378 | 3.8679386 |
| 7313 | 3.8640956 | 7346 | 3.8660509 | 7379 | 3.8679975 |
| 7314 | 3.8641550 | 7347 | 3.8661100 | 7380 | 3.8680564 |
| 7315 | 3.8642143 | 7348 | 3.8661691 | 7381 | 3.8681152 |
| 7316 | 3.8642737 | 7349 | 3.8662282 | 7382 | 3.8681740 |
| 7317 | 3.8643331 | 7350 | 3.8662873 | 7383 | 3.8682329 |
| 7318 | 3.8643924 | 7351 | 3.8663464 | 7384 | 3.8682917 |
| 7319 | 3.8644517 | 7352 | 3.8664055 | 7385 | 3.8683505 |
| 7320 | 3.8645111 | 7353 | 3.8664646 | 7386 | 3.8684093 |
| 7321 | 3.8645704 | 7354 | 3.8665236 | 7387 | 3.8684681 |
| 7322 | 3.8646297 | 7355 | 3.8665827 | 7388 | 3.8685269 |
| 7323 | 3.8646890 | 7356 | 3.8666417 | 7389 | 3.8685857 |
| 7324 | 3.8647483 | 7357 | 3.8667008 | 7390 | 3.8686444 |
| 7325 | 3.8648076 | 7358 | 3.8667598 | 7391 | 3.8687032 |
| 7326 | 3.8648669 | 7359 | 3.8668188 | 7392 | 3.8687620 |
| 7327 | 3.8649262 | 7360 | 3.8668778 | 7393 | 3.8688207 |
| 7328 | 3.8649855 | 7361 | 3.8669368 | 7394 | 3.8688794 |
| 7329 | 3.8650447 | 7362 | 3.8669958 | 7395 | 3.8689382 |
| 7330 | 3.8651040 | 7363 | 3.8670548 | 7396 | 3.8689969 |
| 7331 | 3.8651632 | 7364 | 3.8671138 | 7397 | 3.8690556 |
| 7332 | 3.8652225 | 7365 | 3.8671728 | 7398 | 3.8691143 |
| 7333 | 3.8652817 | 7366 | 3.8672317 | 7399 | 3.8691730 |
| 7334 | 3.8653409 | 7367 | 3.8672907 | 7400 | 3.8692317 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 7401 | 3.8692904 | 7434 | 3.8712226 | 7467 | 3.8731461 |
| 7402 | 3.8693491 | 7435 | 3.8712810 | 7468 | 3.8732043 |
| 7403 | 3.8694077 | 7436 | 3.8713394 | 7469 | 3.8732624 |
| 7404 | 3.8694664 | 7437 | 3.8713978 | 7470 | 3.8733206 |
| 7405 | 3.8695251 | 7438 | 3.8714562 | 7471 | 3.8733787 |
| 7406 | 3.8695837 | 7439 | 3.8715146 | 7472 | 3.8734369 |
| 7407 | 3.8696423 | 7440 | 3.8715729 | 7473 | 3.8734950 |
| 7408 | 3.8697010 | 7441 | 3.8716313 | 7474 | 3.8735531 |
| 7409 | 3.8697596 | 7442 | 3.8716897 | 7475 | 3.8736112 |
| 7410 | 3.8698182 | 7443 | 3.8717480 | 7476 | 3.8736693 |
| 7411 | 3.8698768 | 7444 | 3.8718064 | 7477 | 3.8737274 |
| 7412 | 3.8699354 | 7445 | 3.8718647 | 7478 | 3.8737855 |
| 7413 | 3.8699940 | 7446 | 3.8719230 | 7479 | 3.8738435 |
| 7414 | 3.8700526 | 7447 | 3.8719814 | 7480 | 3.8739016 |
| 7415 | 3.8701111 | 7448 | 3.8720397 | 7481 | 3.8739597 |
| 7416 | 3.8701697 | 7449 | 3.8720980 | 7482 | 3.8740177 |
| 7417 | 3.8702283 | 7450 | 3.8721563 | 7483 | 3.8740757 |
| 7418 | 3.8702868 | 7451 | 3.8722146 | 7484 | 3.8741338 |
| 7419 | 3.8703454 | 7452 | 3.8722728 | 7485 | 3.8741918 |
| 7420 | 3.8704039 | 7453 | 3.8723311 | 7486 | 3.8742498 |
| 7421 | 3.8704624 | 7454 | 3.8723894 | 7487 | 3.8743078 |
| 7422 | 3.8705209 | 7455 | 3.8724476 | 7488 | 3.8743658 |
| 7423 | 3.8705795 | 7456 | 3.8725059 | 7489 | 3.8744238 |
| 7424 | 3.8706380 | 7457 | 3.8725641 | 7490 | 3.8744818 |
| 7425 | 3.8706965 | 7458 | 3.8726224 | 7491 | 3.8745398 |
| 7426 | 3.8707549 | 7459 | 3.8726806 | 7492 | 3.8745978 |
| 7427 | 3.8708134 | 7460 | 3.8727388 | 7493 | 3.8746557 |
| 7428 | 3.8708719 | 7461 | 3.8727970 | 7494 | 3.8747137 |
| 7429 | 3.8709304 | 7462 | 3.8728552 | 7495 | 3.8747716 |
| 7430 | 3.8709888 | 7463 | 3.8729134 | 7496 | 3.8748296 |
| 7431 | 3.8710473 | 7464 | 3.8729716 | 7497 | 3.8748875 |
| 7432 | 3.8711057 | 7465 | 3.8730298 | 7498 | 3.8749454 |
| 7433 | 3.8711641 | 7466 | 3.8730880 | 7499 | 3.8750034 |
| 7434 | 3.8712226 | 7467 | 3.8731461 | 7500 | 3.8750613 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 7501 | 3.8751192 | 7534 | 3.8770256 | 7567 | 3.8789237 |
| 7502 | 3.8751771 | 7535 | 3.8770833 | 7568 | 3.8789811 |
| 7503 | 3.8752349 | 7536 | 3.8771409 | 7569 | 3.8790385 |
| 7504 | 3.8752928 | 7537 | 3.8771985 | 7570 | 3.8790959 |
| 7505 | 3.8753507 | 7538 | 3.8772561 | 7571 | 3.8791532 |
| 7506 | 3.8754086 | 7539 | 3.8773137 | 7572 | 3.8792106 |
| 7507 | 3.8754664 | 7540 | 3.8773713 | 7573 | 3.8792680 |
| 7508 | 3.8755243 | 7541 | 3.8774289 | 7574 | 3.8793253 |
| 7509 | 3.8755821 | 7542 | 3.8774865 | 7575 | 3.8793826 |
| 7510 | 3.8756399 | 7543 | 3.8775441 | 7576 | 3.8794400 |
| 7511 | 3.8756978 | 7544 | 3.8776017 | 7577 | 3.8794973 |
| 7512 | 3.8757556 | 7545 | 3.8776592 | 7578 | 3.8795546 |
| 7513 | 3.8758134 | 7546 | 3.8777168 | 7579 | 3.8796119 |
| 7514 | 3.8758712 | 7547 | 3.8777743 | 7580 | 3.8796692 |
| 7515 | 3.8759290 | 7548 | 3.8778319 | 7581 | 3.8797265 |
| 7516 | 3.8759868 | 7549 | 3.8778894 | 7582 | 3.8797838 |
| 7517 | 3.8760445 | 7550 | 3.8779469 | 7583 | 3.8798411 |
| 7518 | 3.8761023 | 7551 | 3.8780045 | 7584 | 3.8798983 |
| 7519 | 3.8761601 | 7552 | 3.8780620 | 7585 | 3.8799556 |
| 7520 | 3.8762178 | 7553 | 3.8781195 | 7586 | 3.8800128 |
| 7521 | 3.8762756 | 7554 | 3.8781770 | 7587 | 3.8800701 |
| 7522 | 3.8763333 | 7555 | 3.8782345 | 7588 | 3.8801273 |
| 7523 | 3.8763911 | 7556 | 3.8782919 | 7589 | 3.8801846 |
| 7524 | 3.8764488 | 7557 | 3.8783494 | 7590 | 3.8802418 |
| 7525 | 3.8765065 | 7558 | 3.8784069 | 7591 | 3.8802990 |
| 7526 | 3.8765642 | 7559 | 3.8784643 | 7592 | 3.8803562 |
| 7527 | 3.8766219 | 7560 | 3.8785218 | 7593 | 3.8804134 |
| 7528 | 3.8766796 | 7561 | 3.8785792 | 7594 | 3.8804706 |
| 7529 | 3.8767373 | 7562 | 3.8786367 | 7595 | 3.8805278 |
| 7530 | 3.8767950 | 7563 | 3.8786941 | 7596 | 3.8805850 |
| 7531 | 3.8768526 | 7564 | 3.8787515 | 7597 | 3.8806421 |
| 7532 | 3.8769103 | 7565 | 3.8788089 | 7598 | 3.8806993 |
| 7533 | 3.8769680 | 7566 | 3.8788663 | 7599 | 3.8807564 |
| 7534 | 3.8770256 | 7567 | 3.8789237 | 7600 | 3.8808136 |

| N. | Logarit. | N. | Logarit | N. | Logarit. |
|---|---|---|---|---|---|
| 7601 | 3.8808707 | 7634 | 3.8827522 | 7667 | 3.8846255 |
| 7602 | 3.8809279 | 7635 | 3.8828090 | 7668 | 3.8846821 |
| 7603 | 3.8809850 | 7636 | 3.8828659 | 7669 | 3.8847387 |
| 7604 | 3.8810421 | 7637 | 3.8829228 | 7670 | 3.8847954 |
| 7605 | 3.8810992 | 7638 | 3.8829797 | 7671 | 3.8848520 |
| 7606 | 3.8811563 | 7639 | 3.8830365 | 7672 | 3.8849086 |
| 7607 | 3.8812134 | 7640 | 3.8830934 | 7673 | 3.8849652 |
| 7608 | 3.8812705 | 7641 | 3.8831502 | 7674 | 3.8850218 |
| 7609 | 3.8813276 | 7642 | 3.8832070 | 7675 | 3.8850784 |
| 7610 | 3.8813847 | 7643 | 3.8832639 | 7676 | 3.8851350 |
| 7611 | 3.8814417 | 7644 | 3.8833207 | 7677 | 3.8851915 |
| 7612 | 3.8814988 | 7645 | 3.8833775 | 7678 | 3.8852481 |
| 7613 | 3.8815558 | 7646 | 3.8834343 | 7679 | 3.8853047 |
| 7614 | 3.8816129 | 7647 | 3.8834911 | 7680 | 3.8853612 |
| 7615 | 3.8816699 | 7648 | 3.8835479 | 7681 | 3.8854178 |
| 7616 | 3.8817269 | 7649 | 3.8836047 | 7682 | 3.8854743 |
| 7617 | 3.8817840 | 7650 | 3.8836614 | 7683 | 3.8855308 |
| 7618 | 3.8818410 | 7651 | 3.8837182 | 7684 | 3.8855874 |
| 7619 | 3.8818980 | 7652 | 3.8837750 | 7685 | 3.8856439 |
| 7620 | 3.8819550 | 7653 | 3.8838317 | 7686 | 3.8857004 |
| 7621 | 3.8820120 | 7654 | 3.8838885 | 7687 | 3.8857569 |
| 7622 | 3.8820689 | 7655 | 3.8839452 | 7688 | 3.8858134 |
| 7623 | 3.8821259 | 7656 | 3.8840019 | 7689 | 3.8858699 |
| 7624 | 3.8821829 | 7657 | 3.8840586 | 7690 | 3.8859263 |
| 7625 | 3.8822398 | 7658 | 3.8841154 | 7691 | 3.8859828 |
| 7626 | 3.8822968 | 7659 | 3.8841721 | 7692 | 3.8860393 |
| 7627 | 3.8823537 | 7660 | 3.8842288 | 7693 | 3.8860957 |
| 7628 | 3.8824107 | 7661 | 3.8842855 | 7694 | 3.8861522 |
| 7629 | 3.8824676 | 7662 | 3.8843421 | 7695 | 3.8862086 |
| 7630 | 3.8825245 | 7663 | 3.8843988 | 7696 | 3.8862651 |
| 7631 | 3.8825815 | 7664 | 3.8844555 | 7697 | 3.8863215 |
| 7632 | 3.8826384 | 7665 | 3.8845122 | 7698 | 3.8863779 |
| 7633 | 3.8826953 | 7666 | 3.8845688 | 7699 | 3.8864343 |
| 7634 | 3.8827522 | 7667 | 3.8846255 | 7700 | 3.8864907 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 7701 | 3.8865471 | 7734 | 3.8884042 | 7767 | 3.8902533 |
| 7702 | 3.8866035 | 7735 | 3.8884603 | 7768 | 3.8903092 |
| 7703 | 3.8866599 | 7736 | 3.8885165 | 7769 | 3.8903651 |
| 7704 | 3.8867163 | 7737 | 3.8885726 | 7770 | 3.8904210 |
| 7705 | 3.8867726 | 7738 | 3.8886287 | 7771 | 3.8904769 |
| 7706 | 3.8868290 | 7739 | 3.8886848 | 7772 | 3.8905328 |
| 7707 | 3.8868854 | 7740 | 3.8887410 | 7773 | 3.8905887 |
| 7708 | 3.8869417 | 7741 | 3.8887971 | 7774 | 3.8906445 |
| 7709 | 3.8869980 | 7742 | 3.8888532 | 7775 | 3.8907004 |
| 7710 | 3.8870544 | 7743 | 3.8889093 | 7776 | 3.8907562 |
| 7711 | 3.8871107 | 7744 | 3.8889653 | 7777 | 3.8908121 |
| 7712 | 3.8871670 | 7745 | 3.8890214 | 7778 | 3.8908679 |
| 7713 | 3.8872233 | 7746 | 3.8890775 | 7779 | 3.8909238 |
| 7714 | 3.8872796 | 7747 | 3.8891335 | 7780 | 3.8909796 |
| 7715 | 3.8873359 | 7748 | 3.8891896 | 7781 | 3.8910354 |
| 7716 | 3.8873922 | 7749 | 3.8892457 | 7782 | 3.8910912 |
| 7717 | 3.8874485 | 7750 | 3.8893017 | 7783 | 3.8911470 |
| 7718 | 3.8875048 | 7751 | 3.8893577 | 7784 | 3.8912028 |
| 7719 | 3.8875610 | 7752 | 3.8894138 | 7785 | 3.8912586 |
| 7720 | 3.8876173 | 7753 | 3.8894698 | 7786 | 3.8913[illegible]44 |
| 7721 | 3.8876735 | 7754 | 3.8895258 | 7787 | 3.8913702 |
| 7722 | 3.8877298 | 7755 | 3.8895818 | 7788 | 3.8914259 |
| 7723 | 3.88778[illegible]0 | 7756 | 3.8896378 | 7789 | 3.8914817 |
| 7724 | 3.8878423 | 7757 | 3.8896938 | 7790 | 3.8915375 |
| 7725 | 3.88[illegible]8985 | 7758 | 3.8897498 | 7791 | 3.8915932 |
| 7726 | 3.8879547 | 7759 | 3.8898057 | 7792 | 3.8916489 |
| 7727 | 3.8880109 | 7760 | 3.8898617 | 7793 | 3.8917047 |
| 7728 | 3.8880671 | 7761 | 3.8899177 | 7794 | 3.8917604 |
| 7729 | 3.8881233 | 7762 | 3.8899736 | 7795 | 3.8918161 |
| 7730 | 3.8881795 | 7763 | 3.8900296 | 7796 | 3.8918718 |
| 7731 | 3.8882357 | 7764 | 3.8900855 | 7797 | 3.8919275 |
| 7732 | 3.8882918 | 7765 | 3.8901415 | 7798 | 3.8919832 |
| 7733 | 3.8883480 | 7766 | 3.8901974 | 7799 | 3.8920389 |
| 7734 | 3.8884042 | 7767 | 3.8902533 | 7800 | 3.8920946 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 7801 | 3.8921503 | 7834 | 3.8939836 | 7867 | 3.8958092 |
| 7802 | 3.8922059 | 7835 | 3.8940390 | 7868 | 3.8958644 |
| 7803 | 3.8922616 | 7836 | 3.8940944 | 7869 | 3.8959195 |
| 7804 | 3.8923173 | 7837 | 3.8941498 | 7870 | 3.8959747 |
| 7805 | 3.8923729 | 7838 | 3.8942053 | 7871 | 3.8960299 |
| 7806 | 3.8924285 | 7839 | 3.8942607 | 7872 | 3.8960851 |
| 7807 | 3.8924842 | 7840 | 3.8943161 | 7873 | 3.8961403 |
| 7808 | 3.8925398 | 7841 | 3.8943715 | 7874 | 3.8961954 |
| 7809 | 3.8925954 | 7842 | 3.8944268 | 7875 | 3.8962506 |
| 7810 | 3.8926510 | 7843 | 3.8944822 | 7876 | 3.8963057 |
| 7811 | 3.8927066 | 7844 | 3.8945376 | 7877 | 3.8963608 |
| 7812 | 3.8927622 | 7845 | 3.8945929 | 7878 | 3.8964160 |
| 7813 | 3.8928178 | 7846 | 3.8946483 | 7879 | 3.8964711 |
| 7814 | 3.8928734 | 7847 | 3.8947036 | 7880 | 3.8965262 |
| 7815 | 3.8929290 | 7848 | 3.8947590 | 7881 | 3.8965813 |
| 7816 | 3.8929845 | 7849 | 3.8948143 | 7882 | 3.8966364 |
| 7817 | 3.8930401 | 7850 | 3.8948696 | 7883 | 3.8966915 |
| 7818 | 3.8930957 | 7851 | 3.8949250 | 7884 | 3.8967466 |
| 7819 | 3.8931512 | 7852 | 3.8949803 | 7885 | 3.8968017 |
| 7820 | 3.8932067 | 7853 | 3.8950356 | 7886 | 3.8968568 |
| 7821 | 3.8932623 | 7854 | 3.8950909 | 7887 | 3.8969118 |
| 7822 | 3.8933178 | 7855 | 3.8951462 | 7888 | 3.8969669 |
| 7823 | 3.8933733 | 7856 | 3.8952015 | 7889 | 3.8970219 |
| 7824 | 3.8934288 | 7857 | 3.8952567 | 7890 | 3.8970770 |
| 7825 | 3.8934843 | 7858 | 3.8953120 | 7891 | 3.8971320 |
| 7826 | 3.8935398 | 7859 | 3.8953673 | 7892 | 3.8971871 |
| 7827 | 3.8935953 | 7860 | 3.8954225 | 7893 | 3.8972421 |
| 7828 | 3.8936508 | 7861 | 3.8954778 | 7894 | 3.8972971 |
| 7829 | 3.8937063 | 7862 | 3.8955330 | 7895 | 3.8973521 |
| 7830 | 3.8937618 | 7863 | 3.8955883 | 7896 | 3.8974071 |
| 7831 | 3.8938172 | 7864 | 3.8956435 | 7897 | 3.8974621 |
| 7832 | 3.8938727 | 7865 | 3.8956987 | 7898 | 3.8975171 |
| 7833 | 3.8939281 | 7866 | 3.8957539 | 7899 | 3.8975721 |
| 7834 | 3.8939836 | 7867 | 3.8958092 | 7900 | 3.8976721 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 7901 | 3.8976821 | 7934 | 3.8994922 | 7967 | 3.9012948 |
| 7902 | 3.8977370 | 7935 | 3.8995469 | 7968 | 3.9013493 |
| 7903 | 3.8977920 | 7936 | 3.8996017 | 7969 | 3.9014038 |
| 7904 | 3.8978469 | 7937 | 3.8996564 | 7970 | 3.9014583 |
| 7905 | 3.8979019 | 7938 | 3.8997111 | 7971 | 3.9015128 |
| 7906 | 3.8979568 | 7939 | 3.8997658 | 7972 | 3.9015673 |
| 7907 | 3.8980117 | 7940 | 3.8998205 | 7973 | 3.9016218 |
| 7908 | 3.8980667 | 7941 | 3.8998752 | 7974 | 3.9016762 |
| 7909 | 3.8981216 | 7942 | 3.8999299 | 7975 | 3.9017307 |
| 7910 | 3.8981765 | 7943 | 3.8999846 | 7976 | 3.9017851 |
| 7911 | 3.8982314 | 7944 | 3.9000392 | 7977 | 3.9018396 |
| 7912 | 3.8982863 | 7945 | 3.9000939 | 7978 | 3.9018940 |
| 7913 | 3.8983412 | 7946 | 3.9001486 | 7979 | 3.9019485 |
| 7914 | 3.8983960 | 7947 | 3.9002032 | 7980 | 3.9020029 |
| 7915 | 3.8984509 | 7948 | 3.9002579 | 7981 | 3.9020573 |
| 7916 | 3.8985058 | 7949 | 3.9003125 | 7982 | 3.9021117 |
| 7917 | 3.8985606 | 7950 | 3.9003671 | 7983 | 3.9021661 |
| 7918 | 3.8986155 | 7951 | 3.9004218 | 7984 | 3.9022205 |
| 7919 | 3.8986703 | 7952 | 3.9004764 | 7985 | 3.9022749 |
| 7920 | 3.8987252 | 7953 | 3.9005310 | 7986 | 3.9023293 |
| 7921 | 3.8987800 | 7954 | 3.9005856 | 7987 | 3.9023837 |
| 7922 | 3.8988348 | 7955 | 3.9006402 | 7988 | 3.9024381 |
| 7923 | 3.8988897 | 7956 | 3.9006948 | 7989 | 3.9024924 |
| 7924 | 3.8989445 | 7957 | 3.9007494 | 7990 | 3.9025468 |
| 7925 | 3.8989993 | 7958 | 3.9008039 | 7991 | 3.9026011 |
| 7926 | 3.8990541 | 7959 | 3.9008585 | 7992 | 3.9026555 |
| 7927 | 3.8991089 | 7960 | 3.9009131 | 7993 | 3.9027098 |
| 7928 | 3.8991636 | 7961 | 3.9009676 | 7994 | 3.9027641 |
| 7929 | 3.8992184 | 7962 | 3.9010222 | 7995 | 3.9028185 |
| 7930 | 3.8992732 | 7963 | 3.9010767 | 7996 | 3.9028728 |
| 7931 | 3.8993279 | 7964 | 3.9011313 | 7997 | 3.9029271 |
| 7932 | 3.8993827 | 7965 | 3.9011858 | 7998 | 3.9029814 |
| 7933 | 3.8994375 | 7966 | 3.9012403 | 7999 | 3.9030357 |
| 7934 | 3.8994922 | 7967 | 3.9012948 | 8000 | 3.9030900 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 8001 | 3.9031443 | 8034 | 3.9049318 | 8067 | 3.9067121 |
| 8002 | 3.9031985 | 8035 | 3.9049859 | 8068 | 3.9067659 |
| 8003 | 3.9032528 | 8036 | 3.9050399 | 8069 | 3.9068197 |
| 8004 | 3.9033071 | 8037 | 3.9050940 | 8070 | 3.9068735 |
| 8005 | 3.9033613 | 8038 | 3.9051480 | 8071 | 3.9069273 |
| 8006 | 3.9034156 | 8039 | 3.9052020 | 8072 | 3.9069812 |
| 8007 | 3.9034698 | 8040 | 3.9052560 | 8073 | 3.9070350 |
| 8008 | 3.9035241 | 8041 | 3.9053101 | 8074 | 3.9070887 |
| 8009 | 3.9035783 | 8042 | 3.9053641 | 8075 | 3.9071425 |
| 8010 | 3.9036325 | 8043 | 3.9054181 | 8076 | 3.9071963 |
| 8011 | 3.9036867 | 8044 | 3.9054721 | 8077 | 3.9072501 |
| 8012 | 3.9037409 | 8045 | 3.9055260 | 8078 | 3.9073038 |
| 8013 | 3.9037951 | 8046 | 3.9055800 | 8079 | 3.9073576 |
| 8014 | 3.9038493 | 8047 | 3.9056340 | 8080 | 3.9074114 |
| 8015 | 3.9039035 | 8048 | 3.9056880 | 8081 | 3.9074651 |
| 8016 | 3.9039577 | 8049 | 3.9057419 | 8082 | 3.9075188 |
| 8017 | 3.9040119 | 8050 | 3.9057959 | 8083 | 3.9075726 |
| 8018 | 3.9040661 | 8051 | 3.9058498 | 8084 | 3.9076263 |
| 8019 | 3.9041202 | 8052 | 3.9059038 | 8085 | 3.9076800 |
| 8020 | 3.9041744 | 8053 | 3.9059577 | 8086 | 3.9077337 |
| 8021 | 3.9042285 | 8054 | 3.9060116 | 8087 | 3.9077874 |
| 8022 | 3.9042827 | 8055 | 3.9060655 | 8088 | 3.9078411 |
| 8023 | 3.9043368 | 8056 | 3.9061195 | 8089 | 3.9078948 |
| 8024 | 3.9043909 | 8057 | 3.9061734 | 8090 | 3.9079485 |
| 8025 | 3.9044450 | 8058 | 3.9062273 | 8091 | 3.9080022 |
| 8026 | 3.9044992 | 8059 | 3.9062812 | 8092 | 3.9080559 |
| 8027 | 3.9045533 | 8060 | 3.9063350 | 8093 | 3.9081095 |
| 8028 | 3.9046074 | 8061 | 3.9063889 | 8094 | 3.9081632 |
| 8029 | 3.9046615 | 8062 | 3.9064428 | 8095 | 3.9082169 |
| 8030 | 3.9047155 | 8063 | 3.9064967 | 8096 | 3.9082705 |
| 8031 | 3.9047696 | 8064 | 3.9065505 | 8097 | 3.9083241 |
| 8032 | 3.9048237 | 8065 | 3.9066044 | 8098 | 3.9083778 |
| 8033 | 3.9048778 | 8066 | 3.9066582 | 8099 | 3.9084314 |
| 8034 | 3.9049318 | 8067 | 3.9067121 | 8100 | 3.9084850 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 8101 | 3.9085386 | 8134 | 3.9103042 | 8167 | 3.9120625 |
| 8102 | 3.9085922 | 8135 | 3.9103575 | 8168 | 3.9121157 |
| 8103 | 3.9086458 | 8136 | 3.9104110 | 8169 | 3.9121689 |
| 8104 | 3.9086994 | 8137 | 3.9104643 | 8170 | 3.9122220 |
| 8105 | 3.9087530 | 8138 | 3.9105177 | 8171 | 3.9122752 |
| 8106 | 3.9088066 | 8139 | 3.9105710 | 8172 | 3.9123233 |
| 8107 | 3.9088602 | 8140 | 3.9106244 | 8173 | 3.9123815 |
| 8108 | 3.9089137 | 8141 | 3.9106777 | 8174 | 3.9124346 |
| 8109 | 3.9089673 | 8142 | 3.9107311 | 8175 | 3.9124878 |
| 8110 | 3.9090208 | 8143 | 3.9107844 | 8176 | 3.9125409 |
| 8111 | 3.9090744 | 8144 | 3.9108378 | 8177 | 3.9125940 |
| 8112 | 3.9091279 | 8145 | 3.9108911 | 8178 | 3.9126471 |
| 8113 | 3.9091815 | 8146 | 3.9109444 | 8179 | 3.9127002 |
| 8114 | 3.9092350 | 8147 | 3.9109977 | 8180 | 3.9127533 |
| 8115 | 3.9092885 | 8148 | 3.9110510 | 8181 | 3.9128064 |
| 8116 | 3.9093420 | 8149 | 3.9111043 | 8182 | 3.9128595 |
| 8117 | 3.9093955 | 8150 | 3.9111576 | 8183 | 3.9129125 |
| 8118 | 3.9094490 | 8151 | 3.9112109 | 8184 | 3.9129656 |
| 8119 | 3.9095025 | 8152 | 3.9112642 | 8185 | 3.9130187 |
| 8120 | 3.9095560 | 8153 | 3.9113174 | 8186 | 3.9130717 |
| 8121 | 3.9096095 | 8154 | 3.9113707 | 8187 | 3.9131248 |
| 8122 | 3.9096630 | 8155 | 3.9114240 | 8188 | 3.9131778 |
| 8123 | 3.9097164 | 8156 | 3.9114772 | 8189 | 3.9132309 |
| 8124 | 3.9097699 | 8157 | 3.9115305 | 8190 | 3.9132839 |
| 8125 | 3.9098234 | 8158 | 3.9115837 | 8191 | 3.9133369 |
| 8126 | 3.9098768 | 8159 | 3.9116369 | 8192 | 3.9133899 |
| 8127 | 3.9099302 | 8160 | 3.9116902 | 8193 | 3.9134429 |
| 8128 | 3.9099837 | 8161 | 3.9117434 | 8194 | 3.9134959 |
| 8129 | 3.9100371 | 8162 | 3.9117966 | 8195 | 3.9135489 |
| 8130 | 3.9100905 | 8163 | 3.9118498 | 8196 | 3.9136019 |
| 8131 | 3.9101440 | 8164 | 3.9119030 | 8197 | 3.9136549 |
| 8132 | 3.9101974 | 8165 | 3.9119562 | 8198 | 3.9137079 |
| 8133 | 3.9102508 | 8166 | 3.9120094 | 8199 | 3.9137609 |
| 8134 | 3.9103042 | 8167 | 3.9120625 | 8200 | 3.9138138 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 8201 | 3.9138668 | 8234 | 3.9156109 | 8267 | 3.9173479 |
| 8202 | 3.9139198 | 8235 | 3.9156636 | 8268 | 3.9174005 |
| 8203 | 3.9139727 | 8236 | 3.9157163 | 8269 | 3.9174530 |
| 8204 | 3.9140256 | 8237 | 3.9157691 | 8270 | 3.9175055 |
| 8205 | 3.9140786 | 8238 | 3.9158218 | 8271 | 3.9175580 |
| 8206 | 3.9141315 | 8239 | 3.9158745 | 8272 | 3.9176105 |
| 8207 | 3.9141844 | 8240 | 3.9159272 | 8273 | 3.9176630 |
| 8208 | 3.9142373 | 8241 | 3.9159799 | 8274 | 3.9177155 |
| 8209 | 3.9142902 | 8242 | 3.9160326 | 8275 | 3.9177680 |
| 8210 | 3.9143432 | 8243 | 3.9160853 | 8276 | 3.9178205 |
| 8211 | 3.9143960 | 8244 | 3.9161380 | 8277 | 3.9178729 |
| 8212 | 3.9144489 | 8245 | 3.9161907 | 8278 | 3.9179254 |
| 8213 | 3.9145018 | 8246 | 3.9162433 | 8279 | 3.9179779 |
| 8214 | 3.9145547 | 8247 | 3.9162960 | 8280 | 3.9180303 |
| 8215 | 3.9146076 | 8248 | 3.9163487 | 8281 | 3.9180828 |
| 8216 | 3.9146604 | 8249 | 3.9164013 | 8282 | 3.9181352 |
| 8217 | 3.9147133 | 8250 | 3.9164539 | 8283 | 3.9181877 |
| 8218 | 3.9147661 | 8251 | 3.9165066 | 8284 | 3.9182401 |
| 8219 | 3.9148190 | 8252 | 3.9165592 | 8285 | 3.9182925 |
| 8220 | 3.9148718 | 8253 | 3.9166118 | 8286 | 3.9183449 |
| 8221 | 3.9149246 | 8254 | 3.9166645 | 8287 | 3.9183973 |
| 8222 | 3.9149775 | 8255 | 3.9167171 | 8288 | 3.9184497 |
| 8223 | 3.9150303 | 8256 | 3.9167697 | 8289 | 3.9185021 |
| 8224 | 3.9150831 | 8257 | 3.9168223 | 8290 | 3.9185545 |
| 8225 | 3.9151359 | 8258 | 3.9168749 | 8291 | 3.9186069 |
| 8226 | 3.9151887 | 8259 | 3.9169275 | 8292 | 3.9186593 |
| 8227 | 3.9152415 | 8260 | 3.9169800 | 8293 | 3.9187117 |
| 8228 | 3.9152943 | 8261 | 3.9170326 | 8294 | 3.9187640 |
| 8229 | 3.9153471 | 8262 | 3.9170852 | 8295 | 3.9188164 |
| 8230 | 3.9153998 | 8263 | 3.9171377 | 8296 | 3.9188687 |
| 8231 | 3.9154526 | 8264 | 3.9171903 | 8297 | 3.9189211 |
| 8232 | 3.9155054 | 8265 | 3.9172428 | 8298 | 3.9189734 |
| 8233 | 3.9155581 | 8266 | 3.9172954 | 8299 | 3.9190258 |
| 8234 | 3.9156109 | 8267 | 3.9173479 | 8300 | 3.9190781 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 8301 | 3.9191304 | 8334 | 3.9208535 | 8367 | 3.9225698 |
| 8302 | 3.9191827 | 8335 | 3.9209056 | 8368 | 3.9226217 |
| 8303 | 3.9192350 | 8336 | 3.9209577 | 8369 | 3.9226736 |
| 8304 | 3.9192873 | 8337 | 3.9210098 | 8370 | 3.9227255 |
| 8305 | 3.9193396 | 8338 | 3.9210619 | 8371 | 3.9227773 |
| 8306 | 3.9193919 | 8339 | 3.9211140 | 8372 | 3.9228292 |
| 8307 | 3.9194442 | 8340 | 3.9211661 | 8373 | 3.9228811 |
| 8308 | 3.9194965 | 8341 | 3.9212181 | 8374 | 3.9229330 |
| 8309 | 3.9195488 | 8342 | 3.9212702 | 8375 | 3.9229848 |
| 8310 | 3.9196010 | 8343 | 3.9213222 | 8376 | 3.9230367 |
| 8311 | 3.9196533 | 8344 | 3.9213743 | 8377 | 3.9230885 |
| 8312 | 3.9197055 | 8345 | 3.9214263 | 8378 | 3.9231404 |
| 8313 | 3.9197578 | 8346 | 3.9214784 | 8379 | 3.9231922 |
| 8314 | 3.9198100 | 8347 | 3.9215304 | 8380 | 3.9232440 |
| 8315 | 3.9198623 | 8348 | 3.9215824 | 8381 | 3.9232958 |
| 8316 | 3.9199145 | 8349 | 3.9216345 | 8382 | 3.9233477 |
| 8317 | 3.9199667 | 8350 | 3.9216865 | 8383 | 3.9233995 |
| 8318 | 3.9200189 | 8351 | 3.9217385 | 8384 | 3.9234513 |
| 8319 | 3.9200711 | 8352 | 3.9217905 | 8385 | 3.9235031 |
| 8320 | 3.9201233 | 8353 | 3.9218425 | 8386 | 3.9235549 |
| 8321 | 3.9201755 | 8354 | 3.9218945 | 8387 | 3.9236066 |
| 8322 | 3.9202277 | 8355 | 3.9219465 | 8388 | 3.9236584 |
| 8323 | 3.9202799 | 8356 | 3.9219984 | 8389 | 3.9237102 |
| 8324 | 3.9203321 | 8357 | 3.9220504 | 8390 | 3.9237620 |
| 8325 | 3.9203842 | 8358 | 3.9221024 | 8391 | 3.9238137 |
| 8326 | 3.9204364 | 8359 | 3.9221543 | 8392 | 3.9238655 |
| 8327 | 3.9204886 | 8360 | 3.9222063 | 8393 | 3.9239172 |
| 8328 | 3.9205407 | 8361 | 3.9222582 | 8394 | 3.9239690 |
| 8329 | 3.9205929 | 8362 | 3.9223102 | 8395 | 3.9240207 |
| 8330 | 3.9206450 | 8363 | 3.9223621 | 8396 | 3.9240724 |
| 8331 | 3.9206971 | 8364 | 3.9224140 | 8397 | 3.9241242 |
| 8332 | 3.9207493 | 8365 | 3.9224659 | 8398 | 3.9241759 |
| 8333 | 3.9208014 | 8366 | 3.9225179 | 8399 | 3.9242276 |
| 8334 | 3.9208535 | 8367 | 3.9225698 | 8400 | 3.9242793 |

| *N.* | *Logarit.* | *N.* | *Logarit.* | *N.* | *Logarit.* |
|---|---|---|---|---|---|
| 8401 | 3.9243310 | 8434 | 3.9260336 | 8467 | 3.9277296 |
| 8402 | 3.9243827 | 8435 | 3.9260851 | 8468 | 3.9277808 |
| 8403 | 3.9244344 | 8436 | 3.9261366 | 8469 | 3.9278321 |
| 8404 | 3.9244860 | 8437 | 3.9261880 | 8470 | 3.9278834 |
| 8405 | 3.9245377 | 8438 | 3.9262395 | 8471 | 3.9279347 |
| 8406 | 3.9245894 | 8439 | 3.9262910 | 8472 | 3.9279859 |
| 8407 | 3.9246410 | 8440 | 3.9263424 | 8473 | 3.9280372 |
| 8408 | 3.9246927 | 8441 | 3.9263939 | 8474 | 3.9280885 |
| 8409 | 3.9247444 | 8442 | 3.9264453 | 8475 | 3.9281397 |
| 8410 | 3.9247960 | 8443 | 3.9264968 | 8476 | 3.9281909 |
| 8411 | 3.9248476 | 8444 | 3.9265482 | 8477 | 3.9282422 |
| 8412 | 3.9248993 | 8445 | 3.9265997 | 8478 | 3.9282934 |
| 8413 | 3.9249509 | 8446 | 3.9266511 | 8479 | 3.9283446 |
| 8414 | 3.9250025 | 8447 | 3.9267025 | 8480 | 3.9283959 |
| 8415 | 3.9250541 | 8448 | 3.9267539 | 8481 | 3.9284471 |
| 8416 | 3.9251057 | 8449 | 3.9268053 | 8482 | 3.9284983 |
| 8417 | 3.9251573 | 8450 | 3.9268567 | 8483 | 3.9285495 |
| 8418 | 3.9252089 | 8451 | 3.9269081 | 8484 | 3.9286007 |
| 8419 | 3.9252605 | 8452 | 3.9269595 | 8485 | 3.9286518 |
| 8420 | 3.9253121 | 8453 | 3.9270109 | 8486 | 3.9287030 |
| 8421 | 3.9253637 | 8454 | 3.9270622 | 8487 | 3.9287542 |
| 8422 | 3.9254152 | 8455 | 3.9271136 | 8488 | 3.9288054 |
| 8423 | 3.9254668 | 8456 | 3.9271650 | 8489 | 3.9288565 |
| 8424 | 3.9255184 | 8457 | 3.9272163 | 8490 | 3.9289077 |
| 8425 | 3.9255699 | 8458 | 3.9272677 | 8491 | 3.9289588 |
| 8426 | 3.9256215 | 8459 | 3.9273190 | 8492 | 3.9290100 |
| 8427 | 3.9256730 | 8460 | 3.9273704 | 8493 | 3.9290611 |
| 8428 | 3.9257245 | 8461 | 3.9274217 | 8494 | 3.9291123 |
| 8429 | 3.9257761 | 8462 | 3.9274730 | 8495 | 3.9291634 |
| 8430 | 3.9258276 | 8463 | 3.9275243 | 8496 | 3.9292145 |
| 8431 | 3.9258791 | 8464 | 3.9275757 | 8497 | 3.9292656 |
| 8432 | 3.9259306 | 8465 | 3.9276270 | 8498 | 3.9293167 |
| 8433 | 3.9259821 | 8466 | 3.9276783 | 8499 | 3.9293678 |
| 8434 | 3.9260336 | 8467 | 3.9277296 | 8500 | 3.9294189 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 8501 | 3.9294700 | 8534 | 3.9311526 | 8567 | 3.9328288 |
| 8502 | 3.9295211 | 8535 | 3.9312035 | 8568 | 3.9328794 |
| 8503 | 3.9295722 | 8536 | 3.9312544 | 8569 | 3.9329301 |
| 8504 | 3.9296232 | 8537 | 3.9313053 | 8570 | 3.9329808 |
| 8505 | 3.9296743 | 8538 | 3.9313561 | 8571 | 3.9330315 |
| 8506 | 3.9297254 | 8539 | 3.9314070 | 8572 | 3.9330822 |
| 8507 | 3.9297764 | 8540 | 3.9314579 | 8573 | 3.9331328 |
| 8508 | 3.9298275 | 8541 | 3.9315087 | 8574 | 3.9331835 |
| 8509 | 3.9298785 | 8542 | 3.9315596 | 8575 | 3.9332342 |
| 8510 | 3.9299296 | 8543 | 3.9316104 | 8576 | 3.9332848 |
| 8511 | 3.9299806 | 8544 | 3.9316612 | 8577 | 3.9333354 |
| 8512 | 3.9300316 | 8545 | 3.9317121 | 8578 | 3.9333860 |
| 8513 | 3.9300826 | 8546 | 3.9317629 | 8579 | 3.9334367 |
| 8514 | 3.9301336 | 8547 | 3.9318137 | 8580 | 3.9334873 |
| 8515 | 3.9301846 | 8548 | 3.9318645 | 8581 | 3.9335379 |
| 8516 | 3.9302356 | 8549 | 3.9319153 | 8582 | 3.9335885 |
| 8517 | 3.9302866 | 8550 | 3.9319661 | 8583 | 3.9336391 |
| 8518 | 3.9303376 | 8551 | 3.9320169 | 8584 | 3.9336897 |
| 8519 | 3.9303886 | 8552 | 3.9320677 | 8585 | 3.9337403 |
| 8520 | 3.9304396 | 8553 | 3.9321185 | 8586 | 3.9337909 |
| 8521 | 3.9304906 | 8554 | 3.9321692 | 8587 | 3.9338415 |
| 8522 | 3.9305415 | 8555 | 3.9322200 | 8588 | 3.9338920 |
| 8523 | 3.9305925 | 8556 | 3.9322708 | 8589 | 3.9339426 |
| 8524 | 3.9306434 | 8557 | 3.9323215 | 8590 | 3.9339932 |
| 8525 | 3.9306944 | 8558 | 3.9323723 | 8591 | 3.9340437 |
| 8526 | 3.9307453 | 8559 | 3.9324230 | 8592 | 3.9340943 |
| 8527 | 3.9307963 | 8560 | 3.9324738 | 8593 | 3.9341448 |
| 8528 | 3.9308472 | 8561 | 3.9325245 | 8594 | 3.9341953 |
| 8529 | 3.9308981 | 8562 | 3.9325752 | 8595 | 3.9342459 |
| 8530 | 3.9309490 | 8563 | 3.9326259 | 8596 | 3.9342964 |
| 8531 | 3.9309999 | 8564 | 3.9326766 | 8597 | 3.9343469 |
| 8532 | 3.9310508 | 8565 | 3.9327274 | 8598 | 3.9343974 |
| 8533 | 3.9311017 | 8566 | 3.9327781 | 8599 | 3.9344479 |
| 8534 | 3.9311526 | 8567 | 3.9328288 | 8600 | 3.9344984 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
|---|---|---|---|---|---|
| 8601 | 3.9345489 | 8634 | 3.9362120 | 8667 | 3.9378688 |
| 8602 | 3.9345994 | 8635 | 3.9362623 | 8668 | 3.9379189 |
| 8603 | 3.9346499 | 8636 | 3.9363126 | 8669 | 3.9379690 |
| 8604 | 3.9347004 | 8637 | 3.9363629 | 8670 | 3.9380191 |
| 8605 | 3.9347509 | 8638 | 3.9364132 | 8671 | 3.9380692 |
| 8606 | 3.9348013 | 8639 | 3.9364635 | 8672 | 3.9381193 |
| 8607 | 3.9348518 | 8640 | 3.9365137 | 8673 | 3.9381693 |
| 8608 | 3.9349022 | 8641 | 3.9365640 | 8674 | 3.9382194 |
| 8609 | 3.9349527 | 8642 | 3.9366143 | 8675 | 3.9382695 |
| 8610 | 3.9350031 | 8643 | 3.9366645 | 8676 | 3.9383195 |
| 8611 | 3.9350536 | 8644 | 3.9367147 | 8677 | 3.9383696 |
| 8612 | 3.9351040 | 8645 | 3.9367650 | 8678 | 3.9384196 |
| 8613 | 3.9351544 | 8646 | 3.9368152 | 8679 | 3.9384697 |
| 8614 | 3.9352049 | 8647 | 3.9368654 | 8680 | 3.9385197 |
| 8615 | 3.9352553 | 8648 | 3.9369157 | 8681 | 3.9385697 |
| 8616 | 3.9353057 | 8649 | 3.9369659 | 8682 | 3.9386198 |
| 8617 | 3.9353561 | 8650 | 3.9370161 | 8683 | 3.9386698 |
| 8618 | 3.9354065 | 8651 | 3.9370663 | 8684 | 3.9387198 |
| 8619 | 3.9354569 | 8652 | 3.9371165 | 8685 | 3.9387698 |
| 8620 | 3.9355073 | 8653 | 3.9371667 | 8686 | 3.9388198 |
| 8621 | 3.9355576 | 8654 | 3.9372169 | 8687 | 3.9388698 |
| 8622 | 3.9356080 | 8655 | 3.9372671 | 8688 | 3.9389198 |
| 8623 | 3.9356584 | 8656 | 3.9373172 | 8689 | 3.9389698 |
| 8624 | 3.9357087 | 8657 | 3.9373674 | 8690 | 3.9390198 |
| 8625 | 3.9357591 | 8658 | 3.9374176 | 8691 | 3.9390697 |
| 8626 | 3.9358094 | 8659 | 3.9374677 | 8692 | 3.9391197 |
| 8627 | 3.9358598 | 8660 | 3.9375179 | 8693 | 3.9391697 |
| 8628 | 3.9359101 | 8661 | 3.9375680 | 8694 | 3.9392196 |
| 8629 | 3.9359605 | 8662 | 3.9376182 | 8695 | 3.9392696 |
| 8630 | 3.9360108 | 8663 | 3.9376683 | 8696 | 3.9393195 |
| 8631 | 3.9360611 | 8664 | 3.9377184 | 8697 | 3.9393695 |
| 8632 | 3.9361114 | 8665 | 3.9377686 | 8698 | 3.9394194 |
| 8633 | 3.9361617 | 8666 | 3.9378187 | 8699 | 3.9394693 |
| 8634 | 3.9362120 | 8667 | 3.9378688 | 8700 | 3.9395192 |

| *N.* | *Logarit.* | *N.* | *Logarit.* | *N.* | *Logarit.* |
|---|---|---|---|---|---|
| 8701 | 3.9395692 | 8734 | 3.9412132 | 8767 | 3.9428510 |
| 8702 | 3.9396191 | 8735 | 3.9412629 | 8768 | 3.9429005 |
| 8703 | 3.9396690 | 8736 | 3.9413126 | 8769 | 3.9429501 |
| 8704 | 3.9397189 | 8737 | 3.9413623 | 8770 | 3.9429996 |
| 8705 | 3.9397688 | 8738 | 3.9414120 | 8771 | 3.9430491 |
| 8706 | 3.9398187 | 8739 | 3.9414617 | 8772 | 3.9430986 |
| 8707 | 3.9398685 | 8740 | 3.9415114 | 8773 | 3.9431481 |
| 8708 | 3.9399184 | 8741 | 3.9415611 | 8774 | 3.9431976 |
| 8709 | 3.9399683 | 8742 | 3.9416108 | 8775 | 3.9432471 |
| 8710 | 3.9400182 | 8743 | 3.9416605 | 8776 | 3.9432966 |
| 8711 | 3.9400680 | 8744 | 3.9417101 | 8777 | 3.9433461 |
| 8712 | 3.9401179 | 8745 | 3.9417598 | 8778 | 3.9433956 |
| 8713 | 3.9401677 | 8746 | 3.9418095 | 8779 | 3.9434450 |
| 8714 | 3.9402176 | 8747 | 3.9418591 | 8780 | 3.9434945 |
| 8715 | 3.9402674 | 8748 | 3.9419088 | 8781 | 3.9435440 |
| 8716 | 3.9403172 | 8749 | 3.9419584 | 8782 | 3.9435934 |
| 8717 | 3.9403670 | 8750 | 3.9420081 | 8783 | 3.9436429 |
| 8718 | 3.9404169 | 8751 | 3.9420577 | 8784 | 3.9436923 |
| 8719 | 3.9404667 | 8752 | 3.9421073 | 8785 | 3.9437418 |
| 8720 | 3.9405165 | 8753 | 3.9421569 | 8786 | 3.9437912 |
| 8721 | 3.9405663 | 8754 | 3.9422065 | 8787 | 3.9438406 |
| 8722 | 3.9406161 | 8755 | 3.9422561 | 8788 | 3.9438900 |
| 8723 | 3.9406659 | 8756 | 3.9423058 | 8789 | 3.9439395 |
| 8724 | 3.9407157 | 8757 | 3.9423553 | 8790 | 3.9439889 |
| 8725 | 3.9407654 | 8758 | 3.9424049 | 8791 | 3.9440383 |
| 8726 | 3.9408152 | 8759 | 3.9424545 | 8792 | 3.9440877 |
| 8727 | 3.9408650 | 8760 | 3.9425041 | 8793 | 3.9441371 |
| 8728 | 3.9409147 | 8761 | 3.9425537 | 8794 | 3.9441865 |
| 8729 | 3.9409645 | 8762 | 3.9426032 | 8795 | 3.9442358 |
| 8730 | 3.9410142 | 8763 | 3.9426528 | 8796 | 3.9442852 |
| 8731 | 3.9410640 | 8764 | 3.9427024 | 8797 | 3.9443346 |
| 8732 | 3.9411137 | 8765 | 3.9427518 | 8798 | 3.9443840 |
| 8733 | 3.9411635 | 8766 | 3.9428015 | 8799 | 3.9444333 |
| 8734 | 3.9412132 | 8767 | 3.9428510 | 8800 | 3.9444827 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 8801 | 3.9445320 | 8834 | 3.9461574 | 8867 | 3.9477767 |
| 8802 | 3.9445814 | 8835 | 3.9462065 | 8868 | 3.9478257 |
| 8803 | 3.9446307 | 8836 | 3.9462557 | 8869 | 3.9478746 |
| 8804 | 3.9446800 | 8837 | 3.9463048 | 8870 | 3.9479236 |
| 8805 | 3.9447294 | 8838 | 3.9463540 | 8871 | 3.9479726 |
| 8806 | 3.9447787 | 8839 | 3.9464031 | 8872 | 3.9480215 |
| 8807 | 3.9448280 | 8840 | 3.9464523 | 8873 | 3.9480705 |
| 8808 | 3.9448773 | 8841 | 3.9465014 | 8874 | 3.9841194 |
| 8809 | 3.9449266 | 8842 | 3.9465505 | 8875 | 3.9481684 |
| 8810 | 3.9449759 | 8843 | 3.9465996 | 8876 | 3.9482173 |
| 8811 | 3.9450252 | 8844 | 3.9466487 | 8877 | 3.9482662 |
| 8812 | 3.9450745 | 8845 | 3.9466978 | 8878 | 3.9483151 |
| 8813 | 3.9451238 | 8846 | 3.9467469 | 8879 | 3.9483640 |
| 8814 | 3.9451730 | 8847 | 3.9467960 | 8880 | 3.9484130 |
| 8815 | 3.9452223 | 8848 | 3.9468451 | 8881 | 3.9484619 |
| 8816 | 3.9452716 | 8849 | 3.9468942 | 8882 | 3.9485108 |
| 8817 | 3.9453208 | 8850 | 3.9469433 | 8883 | 3.9485597 |
| 8818 | 3.9453701 | 8851 | 3.9469923 | 8884 | 3.9486085 |
| 8819 | 3.9454193 | 8852 | 3.9470414 | 8885 | 3.9486574 |
| 8820 | 3.9454686 | 8853 | 3.9470905 | 8886 | 3.9487063 |
| 8821 | 3.9455178 | 8854 | 3.9471395 | 8887 | 3.9487552 |
| 8822 | 3.9455670 | 8855 | 3.9471886 | 8888 | 3.9488040 |
| 8823 | 3.9456163 | 8856 | 3.9472376 | 8889 | 3.9488529 |
| 8824 | 3.9456655 | 8857 | 3.9472866 | 8890 | 3.9489018 |
| 8825 | 3.9457147 | 8858 | 3.9473357 | 8891 | 3.9489506 |
| 8826 | 3.9457639 | 8859 | 3.9473847 | 8892 | 3.9489994 |
| 8827 | 3.9458131 | 8860 | 3.9474337 | 8893 | 3.9490483 |
| 8828 | 3.9458623 | 8861 | 3.9474827 | 8894 | 3.9490971 |
| 8829 | 3.9459115 | 8862 | 3.9475317 | 8895 | 3.9491459 |
| 8830 | 3.9459607 | 8863 | 3.9475807 | 8896 | 3.9491948 |
| 8831 | 3.9460099 | 8864 | 3.9476297 | 8897 | 3.9492436 |
| 8832 | 3.9460591 | 8865 | 3.9476787 | 8898 | 3.9492924 |
| 8833 | 3.9461082 | 8866 | 3.9477277 | 8899 | 3.9493412 |
| 8834 | 3.9461574 | 8867 | 3.9477767 | 8900 | 3.9493900 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 8901 | 3.9494388 | 8934 | 3.9510459 | 8967 | 3.9526472 |
| 8902 | 3.9494876 | 8935 | 3.9510946 | 8968 | 3.9526956 |
| 8903 | 3.9495364 | 8936 | 3.9511432 | 8969 | 3.9527440 |
| 8904 | 3.9495852 | 8937 | 3.9511918 | 8970 | 3.9527924 |
| 8905 | 3.9496339 | 8938 | 3.9512404 | 8971 | 3.9528409 |
| 8906 | 3.9496827 | 8939 | 3.9512889 | 8972 | 3.9528893 |
| 8907 | 3.9497315 | 8940 | 3.9513375 | 8973 | 3.9529377 |
| 8908 | 3.9497802 | 8941 | 3.9513861 | 8974 | 3.9529861 |
| 8909 | 3.9498290 | 8942 | 3.9514347 | 8975 | 3.9530345 |
| 8910 | 3.9498777 | 8943 | 3.9514832 | 8976 | 3.9530828 |
| 8911 | 3.9499264 | 8944 | 3.9515318 | 8977 | 3.9531312 |
| 8912 | 3.9499752 | 8945 | 3.9515803 | 8978 | 3.9531796 |
| 8913 | 3.9500239 | 8946 | 3.9516289 | 8979 | 3.9532280 |
| 8914 | 3.9500726 | 8947 | 3.9516774 | 8980 | 3.9532763 |
| 8915 | 3.9501213 | 8948 | 3.9517260 | 8981 | 3.9533247 |
| 8916 | 3.9501701 | 8949 | 3.9517745 | 8982 | 3.9533730 |
| 8917 | 3.9502188 | 8950 | 3.9518230 | 8983 | 3.9534214 |
| 8918 | 3.9502675 | 8951 | 3.9518716 | 8984 | 3.9534697 |
| 8919 | 3.9503162 | 8952 | 3.9519201 | 8985 | 3.9535181 |
| 8920 | 3.9503649 | 8953 | 3.9519686 | 8986 | 3.9535664 |
| 8921 | 3.9504135 | 8954 | 3.9520171 | 8987 | 3.9536147 |
| 8922 | 3.9504622 | 8955 | 3.9520656 | 8988 | 3.9536631 |
| 8923 | 3.9505109 | 8956 | 3.9521141 | 8989 | 3.9537114 |
| 8924 | 3.9505596 | 8957 | 3.9521626 | 8990 | 3.9537597 |
| 8925 | 3.9506082 | 8958 | 3.9522111 | 8991 | 3.9538080 |
| 8926 | 3.9506569 | 8959 | 3.9522595 | 8992 | 3.9538563 |
| 8927 | 3.9507055 | 8960 | 3.9523080 | 8993 | 3.9539046 |
| 8928 | 3.9507542 | 8961 | 3.9523565 | 8994 | 3.9539529 |
| 8929 | 3.9508028 | 8962 | 3.9524049 | 8995 | 3.9540012 |
| 8930 | 3.9508515 | 8963 | 3.9524534 | 8996 | 3.9540494 |
| 8931 | 3.9509001 | 8964 | 3.9525018 | 8997 | 3.9540977 |
| 8932 | 3.9509487 | 8965 | 3.9525503 | 8998 | 3.9541460 |
| 8933 | 3.9509973 | 8966 | 3.9525987 | 8999 | 3.9541943 |
| 8934 | 3.9510459 | 8967 | 3.9526472 | 9000 | 3.9542425 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 9001 | 3.9542908 | 9034 | 3.9558801 | 9067 | 3.9574636 |
| 9002 | 3.9543390 | 9035 | 3.9559282 | 9068 | 3.9575115 |
| 9003 | 3.9543872 | 9036 | 3.9559762 | 9069 | 3.9575594 |
| 9004 | 3.9544355 | 9037 | 3.9560243 | 9070 | 3.9576073 |
| 9005 | 3.9544837 | 9038 | 3.9560723 | 9071 | 3.9576552 |
| 9006 | 3.9545319 | 9039 | 3.9561204 | 9072 | 3.9577030 |
| 9007 | 3.9545802 | 9040 | 3.9561684 | 9073 | 3.9577509 |
| 9008 | 3.9546284 | 9041 | 3.9562165 | 9074 | 3.9577988 |
| 9009 | 3.9546766 | 9042 | 3.9562645 | 9075 | 3.9578466 |
| 9010 | 3.9547248 | 9043 | 3.9563125 | 9076 | 3.9578945 |
| 9011 | 3.9547730 | 9044 | 3.9563606 | 9077 | 3.9579423 |
| 9012 | 3.9548212 | 9045 | 3.9564086 | 9078 | 3.9579902 |
| 9013 | 3.9548694 | 9046 | 3.9564566 | 9079 | 3.9580380 |
| 9014 | 3.9549176 | 9047 | 3.9565046 | 9080 | 3.9580858 |
| 9015 | 3.9549657 | 9048 | 3.9565526 | 9081 | 3.9581337 |
| 9016 | 3.9550139 | 9049 | 3.9566006 | 9082 | 3.9581815 |
| 9017 | 3.9550621 | 9050 | 3.9566486 | 9083 | 3.9582293 |
| 9018 | 3.9551102 | 9051 | 3.9566966 | 9084 | 3.9582771 |
| 9019 | 3.9551584 | 9052 | 3.9567445 | 9085 | 3.9583249 |
| 9020 | 3.9552065 | 9053 | 3.9567925 | 9086 | 3.9583727 |
| 9021 | 3.9552547 | 9054 | 3.9568405 | 9087 | 3.9584205 |
| 9022 | 3.9553028 | 9055 | 3.9568885 | 9088 | 3.9584683 |
| 9023 | 3.9553510 | 9056 | 3.9569364 | 9089 | 3.9585161 |
| 9024 | 3.9553991 | 9057 | 3.9569844 | 9090 | 3.9585639 |
| 9025 | 3.9554472 | 9058 | 3.9570323 | 9091 | 3.9586117 |
| 9026 | 3.9554953 | 9059 | 3.9570803 | 9092 | 3.9586594 |
| 9027 | 3.9555434 | 9060 | 3.9571282 | 9093 | 3.9587072 |
| 9028 | 3.9555915 | 9061 | 3.9571761 | 9094 | 3.9587549 |
| 9029 | 3.9556397 | 9062 | 3.9572241 | 9095 | 3.9588027 |
| 9030 | 3.9556877 | 9063 | 3.9572720 | 9096 | 3.9588505 |
| 9031 | 3.9557358 | 9064 | 3.9573199 | 9097 | 3.9588982 |
| 9032 | 3.9557839 | 9065 | 3.9573678 | 9098 | 3.9589459 |
| 9033 | 3.9558320 | 9066 | 3.9574157 | 9099 | 3.9589937 |
| 9034 | 3.9558801 | 9067 | 3.9574136 | 9100 | 3.9590414 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 9102 | 3.9591368 | 9135 | 3.9607085 | 9168 | 3.9622746 |
| 9103 | 3.9591845 | 9136 | 3.9607561 | 9169 | 3.9623220 |
| 9104 | 3.9592322 | 9137 | 3.9608036 | 9170 | 3.9623693 |
| 9105 | 3.9592799 | 9138 | 3.9608511 | 9171 | 3.9624167 |
| 9106 | 3.9593276 | 9139 | 3.9608987 | 9172 | 3.9624640 |
| 9107 | 3.9593753 | 9140 | 3.9609462 | 9173 | 3.9625114 |
| 9108 | 3.9594230 | 9141 | 3.9609937 | 9174 | 3.9625587 |
| 9109 | 3.9594707 | 9142 | 3.9610412 | 9175 | 3.9626061 |
| 9110 | 3.9595184 | 9143 | 3.9610887 | 9176 | 3.9626534 |
| 9111 | 3.9595660 | 9144 | 3.9611362 | 9177 | 3.9627007 |
| 9112 | 3.9596137 | 9145 | 3.9611837 | 9178 | 3.9627480 |
| 9113 | 3.9596614 | 9146 | 3.9612312 | 9179 | 3.9627954 |
| 9114 | 3.9597090 | 9147 | 3.9612787 | 9180 | 3.9628427 |
| 9115 | 3.9597567 | 9148 | 3.9613261 | 9181 | 3.9628900 |
| 9116 | 3.9598043 | 9149 | 3.9613736 | 9182 | 3.9629373 |
| 9117 | 3.9598519 | 9150 | 3.9614211 | 9183 | 3.9629846 |
| 9118 | 3.9598996 | 9151 | 3.9614685 | 9184 | 3.9630319 |
| 9119 | 3.9599472 | 9152 | 3.9615160 | 9185 | 3.9630792 |
| 9120 | 3.9599948 | 9153 | 3.9615635 | 9186 | 3.9631264 |
| 9121 | 3.9600424 | 9154 | 3.9616109 | 9187 | 3.9631737 |
| 9122 | 3.9600901 | 9155 | 3.9616583 | 9188 | 3.9632210 |
| 9123 | 3.9601377 | 9156 | 3.9617058 | 9189 | 3.9632682 |
| 9124 | 3.9601853 | 9157 | 3.9617532 | 9190 | 3.9633155 |
| 9125 | 3.9602329 | 9158 | 3.9618006 | 9191 | 3.9633628 |
| 9126 | 3.9602805 | 9259 | 3.9618480 | 9192 | 3.9634100 |
| 9127 | 3.9603280 | 9160 | 3.9618955 | 9193 | 3.9634573 |
| 9128 | 3.9603756 | 9161 | 3.9619429 | 9194 | 3.9635045 |
| 9129 | 3.9604232 | 9162 | 3.9619903 | 9195 | 3.9635517 |
| 9130 | 3.9604708 | 9163 | 3.9620377 | 9196 | 3.9635990 |
| 9131 | 3.9605183 | 9164 | 3.9620851 | 9197 | 3.9636462 |
| 9132 | 3.9605659 | 9165 | 3.9621325 | 9198 | 3.9636934 |
| 9133 | 3.9606134 | 9166 | 3.9621798 | 9199 | 3.9637406 |
| 9134 | 3.9606610 | 9167 | 3.9622272 | 9200 | 3.9637878 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 9202 | 3.9638822 | 9235 | 3.9654369 | 9268 | 3.9669860 |
| 9203 | 3.9639294 | 9236 | 3.9654839 | 9269 | 3.9670329 |
| 9204 | 3.9639766 | 9237 | 3.9655309 | 9270 | 3.9670797 |
| 9205 | 3.9640238 | 9238 | 3.9655779 | 9271 | 3.9671266 |
| 9206 | 3.9640710 | 9239 | 3.9656250 | 9272 | 3.9671734 |
| 9207 | 3.9641181 | 9240 | 3.9656720 | 9273 | 3.9672202 |
| 9208 | 3.9641653 | 9241 | 3.9657190 | 9274 | 3.9672671 |
| 9209 | 3.9642125 | 9242 | 3.9657660 | 9275 | 3.9673139 |
| 9210 | 3.9642596 | 9243 | 3.9658129 | 9276 | 3.9673607 |
| 9211 | 3.9643068 | 9244 | 3.9658599 | 9277 | 3.9674075 |
| 9212 | 3.9643539 | 9245 | 3.9659069 | 9278 | 3.9674544 |
| 9213 | 3.9644011 | 9246 | 3.9659539 | 9279 | 3.9675012 |
| 9214 | 3.9644482 | 9247 | 3.9660008 | 9280 | 3.9675480 |
| 9215 | 3.9644953 | 9248 | 3.9660478 | 9281 | 3.9675948 |
| 9216 | 3.9645425 | 9249 | 3.9660948 | 9282 | 3.9676416 |
| 9217 | 3.9645896 | 9250 | 3.9661417 | 9283 | 3.9676883 |
| 9218 | 3.9646367 | 9251 | 3.9661887 | 9284 | 3.9677351 |
| 9219 | 3.9646838 | 9252 | 3.9662356 | 9285 | 3.9677819 |
| 9220 | 3.9647309 | 9253 | 3.9662826 | 9286 | 3.9678287 |
| 9221 | 3.9647780 | 9254 | 3.9663295 | 9287 | 3.9678754 |
| 9222 | 3.9648251 | 9255 | 3.9663764 | 9288 | 3.9679222 |
| 9223 | 3.9648722 | 9256 | 3.9664233 | 9289 | 3.9679690 |
| 9224 | 3.9649193 | 9257 | 3.9664703 | 9290 | 3.9680157 |
| 9225 | 3.9649664 | 9258 | 3.9665172 | 9291 | 3.9680625 |
| 9226 | 3.9650134 | 9259 | 3.9665641 | 9292 | 3.9681092 |
| 9227 | 3.9650605 | 9260 | 3.9666110 | 9293 | 3.9681559 |
| 9228 | 3.9651076 | 9261 | 3.9666579 | 9294 | 3.9682027 |
| 9229 | 3.9651546 | 9262 | 3.9667048 | 9295 | 3.9682494 |
| 9230 | 3.9652017 | 9263 | 3.9667517 | 9296 | 3.9682961 |
| 9231 | 3.9652487 | 9264 | 3.9667985 | 9297 | 3.9683428 |
| 9232 | 3.9652958 | 9265 | 3.9668454 | 9298 | 3.9683895 |
| 9233 | 3.9653428 | 9266 | 3.9668923 | 9299 | 3.9684362 |
| 9234 | 3.9653898 | 9267 | 3.9669392 | 9300 | 3.9684809 |

| N. | Logarit. | N. | Logarit. | N. | Logarit. |
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| 9103 | 3.9591845 | 9136 | 3.9607561 | 9169 | 3.9623220 |
| 9104 | 3.9592322 | 9137 | 3.9608036 | 9170 | 3.9623693 |
| 9105 | 3.9592799 | 9138 | 3.9608511 | 9171 | 3.9624167 |
| 9106 | 3.9593276 | 9139 | 3.9608987 | 9172 | 3.9624640 |
| 9107 | 3.9593753 | 9140 | 3.9609462 | 9173 | 3.9625114 |
| 9108 | 3.9594230 | 9141 | 3.9609937 | 9174 | 3.9625587 |
| 9109 | 3.9594707 | 9142 | 3.9610412 | 9175 | 3.9626061 |
| 9110 | 3.9595184 | 9143 | 3.9610887 | 9176 | 3.9626534 |
| 9111 | 3.9595660 | 9144 | 3.9611362 | 9177 | 3.9627007 |
| 9112 | 3.9596137 | 9145 | 3.9611837 | 9178 | 3.9627480 |
| 9113 | 3.9596614 | 9146 | 3.9612312 | 9179 | 3.9627954 |
| 9114 | 3.9597090 | 9147 | 3.9612787 | 9180 | 3.9628427 |
| 9115 | 3.9597567 | 9148 | 3.9613261 | 9181 | 3.9628900 |
| 9116 | 3.9598043 | 9149 | 3.9613736 | 9182 | 3.9629373 |
| 9117 | 3.9598519 | 9150 | 3.9614211 | 9183 | 3.9629846 |
| 9118 | 3.9598996 | 9151 | 3.9614685 | 9184 | 3.9630319 |
| 9119 | 3.9599472 | 9152 | 3.9615160 | 9185 | 3.9630792 |
| 9120 | 3.9599948 | 9153 | 3.9615635 | 9186 | 3.9631264 |
| 9121 | 3.9600424 | 9154 | 3.9616109 | 9187 | 3.9631737 |
| 9122 | 3.9600901 | 9155 | 3.9616583 | 9188 | 3.9632210 |
| 9123 | 3.9601377 | 9156 | 3.9617058 | 9189 | 3.9632682 |
| 9124 | 3.9601853 | 9157 | 3.9617532 | 9190 | 3.9633155 |
| 9125 | 3.9602329 | 9158 | 3.9618006 | 9191 | 3.9633628 |
| 9126 | 3.9602805 | 9259 | 3.9618480 | 9192 | 3.9634100 |
| 9127 | 3.9603280 | 9160 | 3.9618955 | 9193 | 3.9634573 |
| 9128 | 3.9603756 | 9161 | 3.9619429 | 9194 | 3.9635045 |
| 9129 | 3.9604232 | 9162 | 3.9619903 | 9195 | 3.9635517 |
| 9130 | 3.9604708 | 9163 | 3.9620377 | 9196 | 3.9635990 |
| 9131 | 3.9605183 | 9164 | 3.9620851 | 9197 | 3.9636462 |
| 9132 | 3.9605659 | 9165 | 3.9621325 | 9198 | 3.9636934 |
| 9133 | 3.9606134 | 9166 | 3.9621798 | 9199 | 3.9637406 |
| 9134 | 3.9606610 | 9167 | 3.9622272 | 9200 | 3.9637878 |

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| 9202 | 3.9638822 | 9235 | 3.9654369 | 9268 | 3.9669860 |
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| 9204 | 3.9639766 | 9237 | 3.9655309 | 9270 | 3.9670797 |
| 9205 | 3.9640238 | 9238 | 3.9655779 | 9271 | 3.9671266 |
| 9206 | 3.9640710 | 9239 | 3.9556250 | 9272 | 3.9671734 |
| 9207 | 3.9641181 | 9240 | 3.9656720 | 9273 | 3.9672202 |
| 9208 | 3.9641653 | 9241 | 3.9657190 | 9274 | 3.9672671 |
| 9209 | 3.9642125 | 9242 | 3.9657660 | 9275 | 3.9673139 |
| 9210 | 3.9642596 | 9243 | 3.9658129 | 9276 | 3.9673607 |
| 9211 | 3.9643068 | 9244 | 3.9658599 | 9277 | 3.9674075 |
| 9212 | 3.9643539 | 9245 | 3.9659069 | 9278 | 3.9674544 |
| 9213 | 3.9644011 | 9246 | 3.9659539 | 9279 | 3.9675012 |
| 9214 | 3.9644482 | 9247 | 3.9660008 | 9280 | 3.9675480 |
| 9215 | 3.9644953 | 9248 | 3.9660478 | 9281 | 3.9675948 |
| 9216 | 3.9645425 | 9249 | 3.9660948 | 9282 | 3.9676416 |
| 9217 | 3.9645896 | 9250 | 3.9661417 | 9283 | 3.9676883 |
| 9218 | 3.9646367 | 9251 | 3.9661887 | 9284 | 3.9677351 |
| 9219 | 3.9646838 | 9252 | 3.9662356 | 9285 | 3.9677819 |
| 9220 | 3.9647309 | 9253 | 3.9662826 | 9286 | 3.9678287 |
| 9221 | 3.9647780 | 9254 | 3.9663295 | 9287 | 3.9678754 |
| 9222 | 3.9648251 | 9255 | 3.9663764 | 9288 | 3.9679222 |
| 9223 | 3.9648722 | 9256 | 3.9664233 | 9289 | 3.9679690 |
| 9224 | 3.9649193 | 9257 | 3.9664703 | 9290 | 3.9680157 |
| 9225 | 3.9649664 | 9258 | 3.9665172 | 9291 | 3.9680625 |
| 9226 | 3.9650134 | 9259 | 3.9665641 | 9292 | 3.9681092 |
| 9227 | 3.9650605 | 9260 | 3.9666110 | 9293 | 3.9681559 |
| 9228 | 3.9651076 | 9261 | 3.9666579 | 9294 | 3.9682027 |
| 9229 | 3.9651546 | 9262 | 3.9667048 | 9295 | 3.9682494 |
| 9230 | 3.9652017 | 9263 | 3.9667517 | 9296 | 3.9682961 |
| 9231 | 3.9652487 | 9264 | 3.9667985 | 9297 | 3.9683428 |
| 9232 | 3.9652958 | 9265 | 3.9668454 | 9298 | 3.9683895 |
| 9233 | 3.9653428 | 9266 | 3.9668923 | 9299 | 3.9684362 |
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| 9304 | 3.9686697 | 9337 | 3.9702074 | 9370 | 3.9717396 |
| 9305 | 3.9687164 | 9338 | 3.9702539 | 9371 | 3.9717859 |
| 9306 | 3.9687630 | 9339 | 3.9703004 | 9372 | 3.9718323 |
| 9307 | 3.9688097 | 9340 | 3.9703469 | 9373 | 3.9718786 |
| 9308 | 3.9688564 | 9341 | 3.9703934 | 9374 | 3.9719249 |
| 9309 | 3.9689030 | 9342 | 3.9704399 | 9375 | 3.9719713 |
| 9310 | 3.9689497 | 9343 | 3.9704863 | 9376 | 3.9720176 |
| 9311 | 3.9689963 | 9344 | 3.9705328 | 9377 | 3.9720639 |
| 9312 | 3.9690430 | 9345 | 3.9705793 | 9378 | 3.9721102 |
| 9313 | 3.9690896 | 9346 | 3.9706258 | 9379 | 3.9721565 |
| 9314 | 3.9691362 | 9347 | 3.9706722 | 9380 | 3.9722028 |
| 9315 | 3.9691829 | 9348 | 3.9707187 | 9381 | 3.9722491 |
| 9316 | 3.9692295 | 9349 | 3.9707652 | 9382 | 3.9722954 |
| 9317 | 3.9692761 | 9350 | 3.9708116 | 9383 | 3.9723417 |
| 9318 | 3.9693227 | 9351 | 3.9708581 | 9384 | 3.9723880 |
| 9319 | 3.9693693 | 9352 | 3.9709045 | 9385 | 3.9724343 |
| 9320 | 3.9694159 | 9353 | 3.9709509 | 9386 | 3.9724805 |
| 9321 | 3.9694625 | 9354 | 3.9709973 | 9387 | 3.9725268 |
| 9322 | 3.9695091 | 9355 | 3.9710438 | 9388 | 3.9725731 |
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| 9324 | 3.9696023 | 9357 | 3.9711366 | 9390 | 3.9726656 |
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| 9328 | 3.9697885 | 9361 | 3.9713222 | 9394 | 3.9728506 |
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| 9330 | 3.9698816 | 9363 | 3.9714150 | 9396 | 3.9729430 |
| 9331 | 3.9699282 | 9364 | 3.9714614 | 9397 | 3.9729892 |
| 9332 | 3.9699747 | 9365 | 3.9715078 | 9398 | 3.9730354 |
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| 9403 | 3.9732664 | 9436 | 3.9747879 | 9469 | 3.9763041 |
| 9404 | 3.9733126 | 9437 | 3.9748340 | 9470 | 3.9763500 |
| 9405 | 3.9733588 | 9438 | 3.9748800 | 9471 | 3.9763958 |
| 9406 | 3.9734050 | 9439 | 3.9749260 | 9472 | 3.9764417 |
| 9407 | 3.9734511 | 9440 | 3.9749720 | 9473 | 3.9764875 |
| 9408 | 3.9734973 | 9441 | 3.9750180 | 9474 | 3.9765334 |
| 9409 | 3.9735435 | 9442 | 3.9750640 | 9475 | 3.9765792 |
| 9410 | 3.9735896 | 9443 | 3.9751100 | 9476 | 3.9766251 |
| 9411 | 3.9736358 | 9444 | 3.9751560 | 9477 | 3.9766709 |
| 9412 | 3.9736819 | 9445 | 3.9752020 | 9478 | 3.9767167 |
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| 9414 | 3.9737742 | 9447 | 3.9752939 | 9480 | 3.9768083 |
| 9415 | 3.9738203 | 9448 | 3.9753399 | 9481 | 3.9768541 |
| 9416 | 3.9738664 | 9449 | 3.9753858 | 9482 | 3.9769000 |
| 9417 | 3.9739126 | 9450 | 3.9754318 | 9483 | 3.9769457 |
| 9418 | 3.9739587 | 9451 | 3.9754778 | 9484 | 3.9769915 |
| 9419 | 3.9740048 | 9452 | 3.9755237 | 9485 | 3.9770373 |
| 9420 | 3.9740509 | 9453 | 3.9755697 | 9486 | 3.9770831 |
| 9421 | 3.9740970 | 9454 | 3.9756156 | 9487 | 3.9771289 |
| 9422 | 3.9741431 | 9455 | 3.9756615 | 9488 | 3.9771747 |
| 9423 | 3.9741892 | 9456 | 3.9757075 | 9489 | 3.9772204 |
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| 9425 | 3.9742814 | 9458 | 3.9757993 | 9491 | 3.9773120 |
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| 9427 | 3.9743735 | 9460 | 3.9758911 | 9493 | 3.9774035 |
| 9428 | 3.9744196 | 9461 | 3.9759370 | 9494 | 3.9774492 |
| 9429 | 3.9744656 | 9462 | 3.9759829 | 9495 | 3.9774950 |
| 9430 | 3.9745117 | 9463 | 3.9760288 | 9496 | 3.9775407 |
| 9431 | 3.9745577 | 9464 | 3.9760747 | 9497 | 3.9775864 |
| 9432 | 3.9746038 | 9465 | 3.9761206 | 9498 | 3.9776322 |
| 9433 | 3.9746498 | 9466 | 3.9761665 | 9499 | 3.9776779 |
| 9434 | 3.9746959 | 9467 | 3.9762124 | 9500 | 3.9777236 |

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| 9504 | 3.9779064 | 9537 | 3.9794118 | 9570 | 3.9809119 |
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| 9509 | 3.9781348 | 9542 | 3.9796394 | 9575 | 3.9811388 |
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| 9511 | 3.9782262 | 9544 | 3.9797304 | 9577 | 3.9812295 |
| 9512 | 3.9782718 | 9545 | 3.9797759 | 9578 | 3.9812748 |
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| 9515 | 3.9784088 | 9548 | 3.9799124 | 9581 | 3.9814108 |
| 9516 | 3.9784544 | 9549 | 3.9799579 | 9582 | 3.9814562 |
| 9517 | 3.9785001 | 9550 | 3.9800034 | 9583 | 3.9815015 |
| 9518 | 3.9785457 | 9551 | 3.9800488 | 9584 | 3.9815468 |
| 9519 | 3.9785913 | 9552 | 3.9800943 | 9585 | 3.9815921 |
| 9520 | 3.9786369 | 9553 | 3.9801398 | 9586 | 3.9816374 |
| 9521 | 3.9786826 | 9554 | 3.9801852 | 9587 | 3.9816827 |
| 9522 | 3.9787282 | 9555 | 3.9802307 | 9588 | 3.9817280 |
| 9523 | 3.9787738 | 9556 | 3.9802761 | 9589 | 3.9817733 |
| 9524 | 3.9788194 | 9557 | 3.9803216 | 9590 | 3.9818186 |
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| 9603 | 3.9824069 | 9636 | 3.9838968 | 9669 | 3.9853816 |
| 9604 | 3.9824521 | 9637 | 3.9839418 | 9670 | 3.9854265 |
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| 9608 | 3.9826330 | 9641 | 3.9841221 | 9674 | 3.9856061 |
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| 9610 | 3.9827234 | 9643 | 3.9842122 | 9676 | 3.9856958 |
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| 9617 | 3.9830396 | 9650 | 3.9845273 | 9683 | 3.9860099 |
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| 9626 | 3.9834458 | 9659 | 3.9849322 | 9692 | 3.9864134 |
| 9627 | 3.9834910 | 9560 | 3.9849771 | 9693 | 3.9864582 |
| 9628 | 3.9835361 | 9661 | 3.9850221 | 9694 | 3.9865030 |
| 9629 | 3.9835812 | 9662 | 3.9850670 | 9695 | 3.9865478 |
| 9630 | 3.9836263 | 9663 | 3.9851120 | 9696 | 3.9865926 |
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| 9632 | 3.9837165 | 9665 | 3.9852018 | 9698 | 3.9866822 |
| 9633 | 3.9837616 | 9666 | 3.9852468 | 9699 | 3.9867269 |
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| 9704 | 3.9869508 | 9737 | 3.9884252 | 9770 | 3.9898946 |
| 9705 | 3.9869955 | 9738 | 3.9884698 | 9771 | 3.9899390 |
| 9706 | 3.9870403 | 9739 | 3.9885144 | 9772 | 3.9899835 |
| 9707 | 3.9870850 | 9740 | 3.9885590 | 9773 | 3.9900279 |
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| 9710 | 3.9872192 | 9743 | 3.9886927 | 9776 | 3.9901612 |
| 9711 | 3.9872640 | 9744 | 3.9887373 | 9777 | 3.9902056 |
| 9712 | 3.9873087 | 9745 | 3.9887818 | 9778 | 3.9902500 |
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| 9716 | 3.9874875 | 9749 | 3.9889601 | 9782 | 3.9904277 |
| 9717 | 3.9875322 | 9750 | 3.9890046 | 9783 | 3.9904721 |
| 9718 | 3.9875769 | 9751 | 3.9890492 | 9784 | 3.9905164 |
| 9719 | 3.9876216 | 9752 | 3.9890937 | 9785 | 3.9905608 |
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| 9721 | 3.9877109 | 9754 | 3.9891828 | 9787 | 3.9906496 |
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| 9732 | 3.9882021 | 9765 | 3.9896722 | 9798 | 3.9911374 |
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| 9806 | 3.9914919 | 9839 | 3.9929510 | 9872 | 3.9944051 |
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| 9813 | 3.9918018 | 9846 | 3.9932598 | 9879 | 3.9947130 |
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| 9817 | 3.9919788 | 9850 | 3.9934362 | 9883 | 3.9948888 |
| 9818 | 3.9920230 | 9851 | 3.9934803 | 9884 | 3.9949327 |
| 9819 | 3.9920673 | 9852 | 3.9935244 | 9885 | 3.9949767 |
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| 9829 | 3.9925093 | 9862 | 3.9939650 | 9895 | 3.9954158 |
| 9830 | 3.9925535 | 9863 | 3.9940090 | 9896 | 3.9954597 |
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| 9909 | 3.9960298 | 9942 | 3.9974737 | 9975 | 3.9989129 |
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| 9917 | 3.9963803 | 9950 | 3.9978231 | 9983 | 3.9992611 |
| 9918 | 3.9964241 | 9951 | 3.9978667 | 9984 | 3.9993046 |
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| 9920 | 3.9965117 | 9953 | 3.9979540 | 9986 | 3.9993916 |
| 9921 | 3.9965554 | 9954 | 3.9979976 | 9987 | 3.9994350 |
| 9922 | 3.9965992 | 9955 | 3.9980413 | 9988 | 3.9994785 |
| 9923 | 3.9966430 | 9956 | 3.9980849 | 9989 | 3.9995220 |
| 9924 | 3.9966867 | 9957 | 3.9981285 | 9990 | 3.9995655 |
| 9925 | 3.9967305 | 9958 | 3.9981721 | 9991 | 3.9996089 |
| 9926 | 3.9967743 | 9959 | 3.9982157 | 9992 | 3.9996524 |
| 9927 | 3.9968180 | 9960 | 3.9982593 | 9993 | 3.9996959 |
| 9928 | 3.9968618 | 9961 | 3.9983029 | 9994 | 3.9997393 |
| 9929 | 3.9969055 | 9962 | 3.9983465 | 9995 | 3.9997828 |
| 9930 | 3.9969492 | 9963 | 3.9983901 | 9996 | 3.9998262 |
| 9931 | 3.9969930 | 9964 | 3.9984337 | 9997 | 3.9998697 |
| 9932 | 3.9970367 | 9965 | 3.9984773 | 9998 | 3.9999131 |
| 9933 | 3.9970804 | 9966 | 3.9985209 | 9999 | 3.9999566 |
| 9934 | 3.9971241 | 9967 | 3.9985644 | 10000 | 4.0000000 |

FINIS.

# PRIVILEGE DV ROY.

LOüis par la grace de Dieu Roy de France & de Navarre ; à nos Amez & feaux Conſeillers les gens tenans nos Cours de Parlement, Maîtres des Requêtes ordinaires de nôtre Hôtel, Baillifs, Senechaus, Prevôts ou leur Lieutenans, & à tous autres Iuſticiers qu'il appartiendra, Salut ; Nôtre bien aimé *Ierôme Proſt*, Marchand Libraire de nôtre bonne Ville de Lion, nous a remontré qu'il a recouvré un Livre intitulé, *Tables de Sinus, Tangentes, Secantes, & de Logarithmes des Sinus, Tangentes, & des nombres depuis l'unité juſques à dix mille, &c. par A. Vlacq :* & ayant eu avis qu'audit Livre il y manquoit pour ſon parfait uſage, les Logarithmes des Sinus & Tangentes convenans aux decades des Secondes pour les trois premiers degrez du quadrant & de leur complement, il les y a fait ajoûter dans cette edition. Mais craignant que quelque envieus de ſon travail ne vouluſſe le faire imprimer ou reimprimer ſur les precedantes impreſſions, ou ſuſciter quelque étranger à ce faire, il a eu recours à nous, & nous a ſupplié tres-humblement luy accorder ſur ce nos lettres de Privilege & permiſſions à ce neceſſaires, portant defenſes à toute perſonne de quelque qualité & condition qu'elle ſoit d'imprimer, faire imprimer, contrefaire, extraire,

extraire, changer, alterer, vendre, debiter, ni même tenir chez ſoy d'autres exemplaires dudit Livre, que de ceux dudit Suppliant, ou de ceux qui auront droit de lui; lequel Livre il deſire faire imprimer en Latin & en François, conjointement, ou ſeparément l'un de l'autre. A CES CAUSES voulant favorablement traiter ledit Expoſant, nous lui avons permis & permettons par ces preſantes, d'imprimer ou faire imprimer, vendre & debiter en tous les lieus & terres de nôtre obeïſſance le ſuſdit Livre avec ſon addition, en Latin & en François, conjointement ou ſeparément l'un de l'autre, & ce durant le tems de ſept années, à commancer du jour qu'il ſera achevé d'imprimer, en tels volumes, marges ou caracteres qu'il avizera bon être. Faiſons defenſes pendant ledit tems à tous Marchans Libraires, Imprimeurs & autres perſonnes de quelque qualité & condition qu'il ſoient, d'imprimer, vendre, debiter, contrefaire, extraire, changer, alterer, ni même tenir chez eux d'autres exemplaires dudit Livre, que de ceux dudit Suppliant, ou de ceux qui auront droit de lui, en quelque ſorte & maniere que ce ſoit, ſur peine de confiſcation des Exemplaires contrefaits, & de mille livres d'amande, applicable un tiers à nous, un tiers à l'Hôpital general, & l'autre tiers audit Expoſant, & de tous dépens domages & interets ſoufferts & à ſouffrir; à la charge par icelui de mettre deux Exemplaires en nôtre Bibliotheque publique, un en celle ſize au Château du Louvre, & un autre en celle de nôtre treſcher

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cher ſeal Chevalier, Chancelier de France, le Sieur Seguier, avant que de l'expoſer en vente, à peine de nullité des preſantes du contenu, auquel vous mandons faire joüir & uſer ledit Expoſant, & ceux qui auront droit de luy, pleinement & paiſiblement pendant ledit tems, voulant qu'en mettant au commancement ou à la fin dudit Livre un Extrait d'icelles, elles ſoient tenuës pour duëment ſignifiées, commandant au premier notre Huiſſier ou Sergent ſur ce requis faire pour l'execution des preſantes tous exploits & actes neceſſaires, ſans demander autre permiſſion, car tel eſt nôtre plaiſir, nonobſtant Clameur de Haro, Chartre Normande, & lettres à ce contraires. Donné à Paris le cinquiéme jour de Mars l'an de grace 1666. & de nôtre regne le vinttroiſiéme : par le Roy en ſon Conſeil, ainſi ſigné Patu, & ſcellé du grand ſcel en cire jaune à cuë pendante, & du côté de la marge ſont écrits ces mots : Regiſtré ſur le Livre de la Communauté des Marchans Libraires de Paris, ſuivant l'Arrét du Parlemant en datte du 8. Avril 1653. Fait à Paris le 14. Avril 1666. auſſi ſigné Piget, Syndic.

*Ledit Ierôme Proſt a cedé ſon preſent droit de Privilege à Iean Thioly, pour en joüir en ſon lieu & place ſuivant l'accord fait entr'eux.*

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BIBLIOTECA NAZ. ROMA VITTORIO EMANUELE

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I. CARTERON,
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